IMPERIAL MYCOLOGICAL INSTITUTE

AN ANNOTATED BIBLIOGRAPHY

OF

MEDICAL MYCOLOGY

1945

The contracted titles used in this bibliography are based on the *World List of Scientific Periodicals*, with the following exceptions:

B.A. = *Biological Abstracts*
B.H. = *Bulletin of Hygiene*
R.A.M. = *Review of Applied Mycology*
T.D.B. = *Tropical Diseases Bulletin*
V.B. = *Veterinary Bulletin.*

421. Rogers (L.) & Megaw (J. W. D.). **Tropical medicine.** Fifth Edition.—x + 518 pp., 2 col. pl., 32 figs., 12 diags., 22 graphs, 21 maps, London, J. & A. Churchill, Ltd., 1944.

Chapter xviii of this treatise (the four previous editions of which appeared in 1930, 1935, 1939, and 1942, respectively), includes brief summaries of the available information on Madura foot, blastomycosis, and *Rhinosporidium* [*seeberi*] tumours.

422. Redaelli (P.) & Ciferri (R.). **Relazione sul primo quinquennio di attività (1938-1943) del Centro di Micologia Umana e Comparata della R. Università di Pavia.** [Report on the first five years' activity (1938–1943) of the Centre of Human and Comparative Mycology of the Royal University of Pavia.]—*Atti Ist. bot. Pavia*, Ser. 5, iii (1), pp. 5–90, 1943.

This report on the first five years' work of the 'Centre of Human and Comparative Mycology', Pavia, includes a fully annotated list of the fungi (including many attacking man) studied or identified there during the period under review.

423. Duncan (J. T.). **A survey of fungous diseases in Great Britain. Results from the first eighteen months.**—*Brit. med. J.*, *1945*, 4429, pp. 715–719, 1945.

The data obtained over a period of 18 months in connexion with the survey of fungous diseases in Great Britain initiated towards the end of 1943 by the Committee for Research in Medical Mycology (Medical Research Council) are analysed under the headings of mycoses of the central nervous system, mycoses of the lung, generalized and other mycoses, and ringworm infections. Appeals to pathologists to co-operate in the undertaking by forwarding material for examination met with a gratifying response, a total of 1,094 specimens having been received. From these preliminary results it is concluded that fungal infections, both indigenous and introduced, are no less important in Great Britain than elsewhere, and that this hitherto neglected field presents great opportunities for further investigation and research.

424. Downing (J. W.) & Conant (N. F.). **Medical progress: mycotic infections.**—*New Engl. J. Med.*, ccxxxiii, 5, pp. 153–161; 6, pp. 181–188, 1945.

This is a survey of the progress to date in the diagnosis and treatment of the fungal infections of man under the four major categories of superficial mycoses, dermatomycoses, and subcutaneous and systemic mycoses. A bibliography of 191 titles is appended.

425. Reilly (H. Christine), Schatz (A.), & Waksman (S. A.). **Antifungal properties of antibiotic substances.**—*J. Bact.*, xlix, 6, pp. 585–594, 3 figs., 1945.

Of seven antibiotic substances tested for their anti-fungal properties on (*a*) four human and animal pathogens, viz., *Candida albicans*, *Trichophyton mentagrophytes* (two strains), and *Cryptococcus neoformans*, and (*b*) four saprophytes, only two, gliotoxin and streptothricin, were found to merit consideration for practical utilization. Certain unsaturated ketones, e.g., acrylophenone, to which some of the antibiotics belong, were shown to possess strong fungistatic and fungicidal attributes.

426. Herrick (J. A.) & Kempf (J. E.). **A study of the fungistatic and fungicidal properties and of the toxicity for mice of sodium azide.**—*J. Bact.*, xlviii, 3, pp. 331–336, 1944.

The growth of nine species of fungi, including *Trichophyton mentagrophytes*, *Blastomyces dermatitidis*, *Histoplasma capsulatum*, and *Monilia* [*Candida*] *albicans*, was completely inhibited by exposure to 0·01 per cent. sodium azide in a liquid medium, and largely suppressed by a concentration of 0·001 per cent., but *H. capsulatum* was the only one to be killed in 24 hours by a 5 per cent. solution of the chemical. Sodium azide proved to be highly toxic to mice, and its fungistatic action was reduced tenfold by the presence of blood. It is therefore of no prospective value as a chemotherapeutic agent in fungal infections.

427. McLaughlin (R. R. M.). **Treatment of tropical skin diseases in the South Pacific.**—*Nav. med. Bull., Wash.*, xlv, 2, pp. 314–322, 1945.

Full directions are given for the treatment of various skin diseases prevalent in the South Pacific, including some of fungal origin, from which one-third of the author's patients were suffering over a nine-month period totalling roughly 2,000 hospital admissions and 3,000 consultations.

428. Viégas (A. P.). **Notas sôbre uma nova especie de Sporormia.** [Notes on a new species of *Sporormia*.]—*Bragantia, S. Paulo*, iii, 7, pp. 155–164, 5 figs., 1943. [Received September, 1945.]

Sporormia articulata n. sp., isolated from facial lesions in a 26-year-old male student at Campinas, São Paulo, Brazil, in 1942, is characterized by elongate-oblong asci, 80 to 90 by 18 to 20 μ, with very short pedicels, containing eight elongate-fusoid, fuscous to black ascospores, 30 to 80 by 6 to 6·5 μ, deeply constricted at the transverse septa and disintegrating into four to eight smooth, fuscous segments, 8 to 10 by 6 to 6·5 μ, those in the middle rectangular, the basal and apical subtruncate. Conidia were not formed.

429. Drobotko (V. G.). **Stachybotryotoxicosis, a new disease of Horses and Humans.**—*Amer. Rev. Soviet Med.*, ii, 3, pp. 238–242, 1945.

The author summarizes the available information on the etiology, symptomatology, and modes of infection of stachybotryotoxicosis (*Stachybotrys alternans*), a disease of horses in the Ukraine, which occasionally affects humans coming into contact with infected hay, the original habitat of the pathogen.

430. Barger (E. H.) & Card (L. E.). **Diseases and parasites of Poultry.** Third Edition.—399 pp., 1 col. pl., 76 figs., 1 diag., 1 graph, 5 maps, London, Henry Kimpton, 1943. [Received September, 1945.] $3.75.

This treatise, which was first issued in 1935 and deals with poultry maladies and remedies in the United States, comprises a brief section (pp. 272–276) on the mycoses, represented by aspergillosis (*Aspergillus fumigatus*), favus (*Lophophyton* [*?Achorion*] *gallinae*), and thrush (*Monilia* [*Candida*] *albicans*).

431. Binford (C. H.) & Lane (J. D.). **Actinomycosis due to Nocardia asteroides. Report of a case.**—*Amer. J. clin. Path.*, xv, 1, pp. 17–23, 5 figs., 1945.

Nocardia [*Actinomyces*] *asteroides*, a rare agent of actinomycosis, was responsible for the death of a 51-year-old patient at the United States Marine Hospital, New Orleans, Louisiana. The autopsy revealed chronic suppurative pneumonitis, a massive brain abscess, and bilateral ischio-rectal abscesses.

432. Macnab (G. H.). **Actinomycosis.**—*Edinb. med. J.*, lii, 6, pp. 219–235, 1945.

This general survey of the bacteriology, pathology, diagnosis, treatment, and surgery of actinomycosis was the subject of a Honeyman Gillespie Lecture delivered in the Royal Infirmary, Edinburgh, on 25th January, 1945.

433. Watts (C. A. H.). **Actinomycosis treated with sulphonamides.**—*S. Afr. med. J.*, xix, 3, pp. 43–44, 1945.

Two cases of proved actinomycosis are described, in which short courses of sulphonamide drugs led to apparently complete cures, and a few other instances of beneficial results from similar treatments are cited from the relevant literature.

434. Walker (J.) & Hamilton (J. W.). **The treatment of actinomycosis with penicillin.**—*Ann. Surg.*, cxxi, 3, pp. 373–384, 10 figs., 1945.

Particulars are given of six cases of actinomycosis, all in males, at the Bushnell General Hospital, Brigham City, Utah, in which penicillin therapy was applied with exceedingly satisfactory results, though the follow-up periods have not yet been long enough to establish the permanence of the cures.

435. Dobson (L.) & Cutting (W. C.). **Penicillin and sulfonamides in the therapy of actinomycosis.**—*J. Amer. med. Ass.*, cxxviii, 12, pp. 856–863, 5 figs., 1945.

Full clinical details are given of 16 cases of actinomycosis (*Actinomyces bovis* in 12, *A. asteroides* in 1, and *A.* sp. in 3) treated with sulphonamides or penicillin at San Francisco, of which seven may be regarded as cured and seven arrested, while two ended fatally. *In vitro* tests corroborated the clinical impression of the varying susceptibility of the organisms to the drugs, and of the slightly greater efficacy of sulphadiazine in certain cases.

436. Keeney (E. L.), Ajello (L.), & Lankford (Elsie). **Studies on common pathogenic fungi and on Actinomyces bovis. I. In vitro effect of fatty acids. II. In vitro effect of sulfonamides. III. In vitro effect of penicillin.**—*Bull. Johns Hopkins Hosp.*, lxxv, 6, pp. 377–416, 1944.

Sodium caprylate, sodium caprate, and sodium undecylenate were usually more fungistatic for 12 common human pathogens and *Actinomyces bovis* in the authors' tests than sodium propionate, sodium valerate, and sodium caproate. Sodium propionate, however, inhibited the growth of *Trichophyton mentagrophytes*, *Microsporum felineum*, and *Histoplasma capsulatum* as well as the longer-chain fatty acid salts and excelled all the other compounds in its effect on *Blastomyces dermatitidis*. The *in vitro* action of sodium caprate and sodium undecylenate qualifies these preparations for clinical trials in the treatment of the cutaneous mycotic infections, tinea pedis, tinea cruris, tinea glabrosa, and tinea capitis. [See also entry 617.]

Sodium sulphamerazine merits closer study for the treatment of chromoblastomycosis (*Phialophora pedrosoi*) and sodium sulphathiazole for that of histoplasmosis (*H. capsulatum*).

Purified penicillin in a concentration of ten Oxford units per c.c. culture medium failed to inhibit the growth either of the dermatophytes or the agents of deep mycotic infections used in the tests, its influence, in fact, tending to be stimulatory rather than otherwise. At 0·01 Oxford unit per c.c., however, the antibiotic suppresses and apparently kills *A. bovis*.

437. Benedict (W. L.) & Iverson (H. A.). **Chronic keratoconjunctivitis associated with Nocardia.**—*Arch. Ophthalm.*, xxxii, 2, pp. 89–92, 2 figs., 1944.

From ocular lesions in a 23-year-old Canadian woman suffering from chronic conjunctivitis and other pathological conditions, the writers isolated, over a period of four years, at the Mayo Clinic, Dorchester, Minnesota, an organism answering to the criteria laid down by Waksman and Henrici [*R.A.M.*, xxiii, p. 150] for *Nocardia* [*Actinomyces*].

438. Citron (S. R.). **The role of Actinomyces israeli in salivary calculus formation.**—*J. dent. Res.*, xxiv, 2, pp. 87–91, 1945.

A study at the Columbia University School of Dental and Oral Surgery, New York, of six strains of *Actinomyces israeli* showed the organism to be unable to decompose protein material into simpler compounds, such as indole or hydrogen sulphide, to raise the alkalinity of media, or precipitate calcium from an inorganic calcium chloride solution containing no phosphate ions. The organism contains alkaline phosphatase and may therefore induce precipitation of calcium phosphates from the saliva, thereby inhibiting calculus formation.

439. Crowley (Mary C.). **Actinomyces in the normal mouth and in infectious processes.**—*Amer. J. Orthodent. oral Surg.*, xxx, 11, pp. 680–682, 1944.

Particulars are given of the methods employed for the isolation of *Actinomyces bovis* from root canals in the author's laboratory at the School of Dentistry, University of Michigan. Some difficulty has been experienced in the culture of the organism, but it may be grown fairly easily in beef infusion broth (pH 7·4) containing 0·1 per cent. agar, 0·2 per cent. glucose, and 5 per cent. ascitic fluid at 37·5° C.

440. Hersh (J. H.). **Primary infection of maxillary sinus by Actinomyces necrophorus.**—*Arch. Otolaryngol.*, xli, 3, pp. 204–207, 1945.

Actinomyces necrophorus was isolated from the maxillary sinus of a 32-year-old soldier in the Army of the United States, who responded favourably to a course of combined systemic and local treatment with penicillin. This is believed to be the first report of actinomycosis of the site in question. A review of the literature on maxillary sinusitis due to *Aspergillus fumigatus* is given.

441. Hamilton (A. J. C.). **Actinomycosis successfully treated with penicillin. Report of two cases.**—*Brit. med. J.*, *1945*, 4429, p. 728, 1945. [*B.H.*, xxi, 103.]

Two cases of cervico-facial actinomycosis are reported from the Royal Northern Infirmary, Inverness, both in males, one 35 and the other 15 years old, in which cures were effected by the intramuscular injection of penicillin totalling 5,800,000 units in the former and 5,200,000 in the latter patient.

442. Hendrickson (G. G.) & Lehman (E. P.). **Cervicofacial actinomycosis successfully treated by penicillin without surgical drainage.**—*J. Amer. med. Ass.*, cxxviii, 6, p. 438, 1945.

At the University of Virginia School of Medicine, the writers treated two cases of cervico-facial actinomycosis (a 27-year-old woman and a 63-year-old

man) by means of penicillin injections with excellent results. The course of treatment lasted 16 days in the former case and 15 in the latter and the total amounts of the drug administered were 2,000,000 and 1,500,000 Oxford units, respectively.

443. Goldin (H.). **A case of cervico-facial actinomycosis following fractured mandible.**—*S. Afr. med. J.*, xix, 17, p. 312, 1945.

Particulars are given of a case of cervico-facial actinomycosis following fracture of the mandible in a 45-year-old non-European soldier at Pietersburg, South Africa. Free drainage, potassium iodide, and X-ray therapy gave good results.

444. MacGregor (A. B.). **Cervico-facial actinomycosis.**—*Proc. roy. Soc. Med.*, xxxviii, 11, pp. 639–640, 4 figs., 1945.

This is an abridged report of the author's paper, presented before the Section of Odontology of the Royal Society of Medicine on 30th April, 1945, on the etiology, incidence, and treatment of cervico-facial actinomycosis.

445. McCrea (J. H.), Steven (R. A.), & Williams (O. O.). **Actinomycotic infection of the soft tissues of the neck; apparent cure following large doses of penicillin. A case report.**—*J. Lab. clin. Med.*, xxx, 6, pp. 509–511, 1945.

A 28-year-old officer in the Army of the United States appeared to recover completely from cervical actinomycosis as a result of intramuscular therapy with massive doses of penicillin amounting to 7,000,000 units over a period of 14 days.

446. Russo (A. G.). **El timol coloidal en el tratamiento de la actinomicosis cervico-facial.** [Colloidal thymol in the treatment of cervico-facial actinomycosis.]—*Rev. Asoc. méd. argent.*, lix, 571, pp. 1370–1373, 6 figs., 1945.

Three cases of cervico-facial actinomycosis in males in Buenos Aires were successfully treated with colloidal thymol, of which total dosages of 3·20, 2·45, and 5·85 gm., respectively, were given.

447. MacNeal (W. J.) & Blevins (Anne). **Bacteriological studies in endocarditis.**—*J. Bact.*, xlix, 6, pp. 603–610, 7 diags., 1945.

One of the organisms obtained from blood cultures of 36 patients suffering from bacterial endocarditis at the New York Post-Graduate Medical School and Hospital, Columbia University, is designated *Actinomyces septicus* n. sp. [without a Latin diagnosis].

448. Beamer (P. R.), Reinhard (E. H.), & Goodof (I. I.). **Vegetative endocarditis caused by higher bacteria and fungi. Review of previous cases and report of two cases with autopsies.**—*Amer. Heart J.*, xxix, 1, pp. 99–112, 6 figs., 1945.

Full descriptions are given of two cases of vegetative endocarditis in male patients at the Barnes Hospital, St. Louis, Missouri, one aged 55 and the other 54 years, the causal organisms being *Actinomyces graminis* and *Histoplasma capsulatum*, respectively. Ten previously reported cases of the same disease caused by various organisms, including *Candida parakrusei*, *C. guilliermondi*, and *H. capsulatum*, are briefly reviewed and compared with the foregoing.

449. Dell' Acqua (G.). **Ueber aktinomykotische Endokarditis.** [On Actinomycotic endocarditis.]—*Klin. Wschr.*, xxii, 5, pp. 100–103, 4 figs., 1943. [*B.H.*, xx, 259.]

Three cases of actinomycotic endocarditis (two males aged 36 and 18 and one female aged 37) admitted to the author's clinic in Bologna are described.

The symptoms are given in detail. Strains of *Actinomyces* were isolated by blood culture from all three patients, that from the third being referred to *A. albus*. The last-named was pathogenic to guinea-pigs and rabbits. An autopsy performed on the third patient revealed the *Actinomyces* in sections through the endocardium.

450. Arden (F.). **Thoracic actinomycosis in a child: response to penicillin.**—*Med. J. Aust.*, xxxii (i), 21, pp. 540–541, 1945.

Details are given in a case of actinomycosis of the chest (a rare disease in children) in a ten-year-old girl at Brisbane, and its treatment with a total of 1,200,000 units of penicillin, administered over a period of 15 days with very successful results.

451. Lynch (J. P.) & Holt (Rebecca A.). **Pulmonary actinomycosis due to Actinomyces graminis.**—*Ann. intern. Med.*, xxiii, 1, pp. 91–99, 6 figs., 1945. [*B.H.*, xxi, 103.]

Actinomyces graminis was isolated on standard media at room temperature and 37° C. from the bronchial secretions, sputa, and pleural fluid of a previously healthy 16-year-old boy at St. Luke's Hospital, Richmond, Virginia, and is thought to have been responsible for an illness which terminated fatally after a duration of 85 days. The organism showed a low-grade pathogenicity for white mice.

452. Oviedo Bustos (J.). **Consideraciones sobre actinomicosis del pulmón tratada con penicilin.** [Considerations on pulmonary actinomycosis treated with penicillin.]—*Rev. Asoc. méd. argent.*, lix, 556, pp. 396–398, 7 figs., 1945.

The treatment of a case of pulmonary actinomycosis in a 50-year-old male Argentinian by intravenous and intramuscular injections of a total of 200,000 Oxford units of penicillin gave immediately beneficial results, except for its failure to reduce the patient's temperature within normal limits, the possible reasons for which are briefly discussed.

453. Kasten (H. E.). **Primary actinomycosis of the lung. With secondary involvement of the kidney and brain presenting abnormal pulse and temperature reactions.**—*Amer. J. Surg.*, N.S., lxix, 3, pp. 397–491, 2 figs., 1945.

The indefinite symptoms and inconsistencies of pulse and temperature range in a 44-year-old carpenter, a patient at the Beloit (Wisconsin) Municipal Hospital, failed to suggest actinomycosis as the cause of chronic illness, and the condition was only disclosed by an autopsy, which revealed perirenal, renal, and cerebral abscesses and chronic granuloma of the right lung.

454. Burrows (H. J.). **Actinomycosis from punch injuries with a report of a case affecting a metacarpal bone.**—*Brit. J. Surg.*, xxxii, 128, pp. 506–508, 4 figs., 1945.

A case of actinomycosis, affecting a metacarpal bone is described, the condition having developed as a sequel to a punch injury in which the skin was cut by the opponent's tooth. Two other similar cases are cited from the relevant literature.

455. Milian (G.). **Actinomycose de la main.** [Actinomycosis of the hand.]—*Ann. Derm. Syph., Paris*, Sér. 8, iii, 9–10, pp. 246–251, 4 figs., 1943. [Received May, 1945.]

A detailed account is given of a case of long-standing actinomycosis, acquired in Poland, affecting the left hand and lower forearm of a 30-year-old female, who reacted favourably to intravenous injections of lipiodol and Lugol's solution. The data refer to the years 1929–1932.

456. Orr (T. G.). **Actinomycoma of the third ventricle, probably primary.**—*J. Amer. med. Ass.*, cxxvii, 13, pp. 757–758, 1 fig., 1945.

Particulars are given of a case of actinomycoma of the third ventricle in a 27-year-old woman at Kansas City, stated to be only the fifth of its kind on record. The white, pedunculated tumour contained degenerating cell nests occupied by deeply blue-staining granular masses, the edges of which showed radiating, refractile strands of basophilic material presenting a typically actinomycotic aspect.

457. Shulman (H.). **Actinomycosis, pleural and abdominal, treated with penicillin: case report.**—*Med. Bull. Veterans' Adm., Wash.*, xxi, 2, pp. 230–231, 1944.

A case of pleural and abdominal actinomycosis in a 25-year-old discharged soldier of the Army of the United States proved fatal despite the administration of 3,000,000 units of penicillin in five courses over a period of one year.

458. Fuller (C. C.) & Wood (H.). **Actinomycotic granuloma of the stomach.**—*J. Amer. med. Ass.*, cxxix, 17, pp. 1163–1165, 5 figs., 1945.

Full clinical details are given of a case of primary actinomycotic granuloma of the stomach in a 48-year-old patient at the United States Naval Hospital, Newport, Rhode Island, which was cured by partial gastrectomy.

459. Dorling (G. E.). **The diagnosis and treatment of abdominal actinomycosis.**—*Med. Pr.*, ccxii, 23, pp. 358–361, 1944.

This is a discussion based on experience at the Hammersmith (L.C.C.) Hospital, London, and a study of the relevant literature, of abdominal actinomycosis under the headings of etiology, age incidence and sex, clinical types, diagnosis, and treatment.

460. Jones (T. E.) & Brownell (T. S.). **Treatment of actinomycosis with penicillin.**—*Cleveland clin. Quart.*, xii, 1, pp. 32–33, 1945.

In two cases of actinomycosis developing after pelvic operations, both in 44-year-old women, pronounced improvement followed the administration of penicillin, of which one patient received 2,000,000 and the other 4,000,000 units.

461. Rashbaum (M.) & McIntosh (Harriet C.). **Pelvic actinomycosis treated by surgery and Roentgen ray, with recovery.**—*Amer. J. Obstet. Gynaec.*, xlvii, 6, pp. 849–854, 3 figs., 1944.

The successful treatment of pelvic actinomycosis in a 30-year-old woman at the New York City Hospital by operation and X-rays is reported, bringing the total of cures in 85 cases of this disease recorded in the relevant literature to eight. Follow-up examinations, five and ten years later, revealed no evidence of abdominal or pelvic disease.

462. Bubis (J. L.). **Report of two cases of pelvic actinomycosis representing the hard and soft types.**—*Med. Times, N.Y.*, lxxiii, 8, pp. 227–234, 1 fig., 1945.

Clinical details are given of two fatal cases of pelvic actinomycosis in female patients, 26 and 34 years old, at the Mt. Sinai Hospital, Cleveland, Ohio.

463. Schneider (D. R.). **Actinomycosis of the testicle: case report.**—*J. Urol.*, liv, 3, pp. 296–300, 2 figs., 1945.

A case of actinomycosis (*Actinomyces bovis*) of the testicle in an 80-year-old coloured farmer at New Orleans, Louisiana, is presented, this report being apparently only the second in the relevant literature.

464. Bianchi (A. E.). **Micetomas podales por Actinomyces y por Micotorulas.** [Mycetomata of the feet due to *Actinomyces* and *Mycotorulae*.]—*Rev. Asoc. méd. argent.*, lix, 560, pp. 700–704, 5 figs., 1945.

Descriptions are given of a histological examination of material from two cases of mycetoma of the foot in Argentina, one due to a member of the *Mycotorula* section of the Torulopsidales, possibly *Candida brumpti*, and the other to a white-grained *Actinomyces* (?*A. gonadensis* or *A. candidus*).

465. Burns (E. L.), Moss (Emma S.), & Brueck (J. W.). **Mycetoma pedis in the United States and Canada.**—*Amer. J. clin. Path.*, xv, 2, pp. 35–49, 6 figs., 1945.

Three cases of mycetoma pedis in natives of Louisiana are fully described, one of the patients being a 54-year-old white female and the other two negro males, 24 and 53 years old, respectively. In the first case the causal organism was not identified, in the second it was probably a true fungus, and in the third a species of *Actinomyces* is thought to have been concerned. Further reports on the two latter are planned.

The observations on 38 cases of the same disease occurring in the United States and Canada are summarized.

466. Peters (J. T.). **A clinical cure of Madura foot.**—*Amer. J. trop. Med.*, xxv, 4, pp. 363–365, 2 figs., 1945.

On the basis of his experience with a 53-year-old coloured farm-labourer, a patient at the Charity Hospital, New Orleans, Louisiana, the author recommends for the treatment of actinomycotic Madura foot doses of sulphonamides sufficient to produce blood-levels of 8 mg. per cent. over a minimum period of three weeks.

467. White (H. S.). **Actinomycosis of the lungs in a Dog.**—*Cornell Vet.*, xxxv, 1, pp. 72–74, 1945.

Details are given of a fatal case of pulmonary actinomycosis in an eight-year-old Irish setter.

468. R. (V. R.). **Lumpy wool of mycotic dermatitis in Lambs.**—*Indian Fmg*, vi, 5, p. 222, 1945.

A species of *Actinomyces* is suspected as the causal organism of a disease known as 'lumpy wool' of young cross-bred merino lambs in India. The trouble, which closely resembles that [due to *A. dermatonomus*] in Australia and South Africa, consists in local or generalized inflammation of the skin and matting of the wool, accompanied by high temperatures and in severe cases involving fairly heavy mortality.

469. Morquer (L.) & Comby (L.). **Étude biologique d'un Actinomyces nouveau, pathogène pour le Cheval.** [Biological study of a new *Actinomyces* pathogenic to the Horse.]—*C. R. Soc. Biol., Paris*, cxxxvi, 21–22, p. 703, 1942. [Received April, 1945.]

The macro- and microscopic characters and biochemical properties of *Actinomyces caballi* n. sp., the agent of subcutaneous abscesses on the horse, are briefly described. The elongated, profusely branched, submerged hyphae measure 0·2 to 0·6 μ in diameter: on solid media the organism gives rise to microconidia, 0·6 to 0·8 μ, and white to greyish, efflorescent colonies, with erect hyphae terminating in short strings of subspherical arthrospores, 0·4 to 0·8 μ. On gelatine lateral spherical or ovoid spores, 0·5 to 1·5 μ, and chlamydospores are formed. The optimum temperature for growth is 37° C. Sources of carbon are mannose, maltose, lactose, dextrose, and saccharose. Milk is coagulated and casein peptonized.

470. Pelouro (J. T.). **Um caso de actinomicose ocular em Bovino.** [Ocular actinomycosis in a Cow.]—*Repos. Lab. Pat. vet., Lisboa*, v, pp. 235-239, 1943. [*V.B.*, xv, 260.]

A gross hemispherical mass protruding from the right orbital cavity of a cow was observed, the eye itself being completely replaced by granulation tissue. Sections revealed the features of an infective granuloma, with typical actinomycotic colonies.

471. Allen (T.). **Some observations on the relationship of Alternaria tenuis to canine eczema.**—*J. Amer. vet. med. Ass.*, cvi, 816, pp. 163–164, 1 fig., 1945.

The author's experimental studies on skin scrapings from dogs suffering from eczema lent no support to the opinion that *Alternaria tenuis* is implicated in the causation of the disease.

472. Hatch (R. D.). **Spergon—fungicide for summer eczema in Dogs.**—*J. Amer. vet. med. Ass.*, xvi, 818, p. 278, 1945.

Spergon, alone or in combination with equal proportions of boric acid or starch, gave very promising results in the control of moist summer eczema, believed to be partially or entirely due to *Alternaria tenuis*, in tests on 15 dogs at the Virginia Polytechnic Institute, Blacksburg.

473. Senturia (B. H.) & Wolf (F. T.). **Treatment of external otitis. II. Action of sulfonamide compounds in fungi isolated from cases of otomycosis.**—*Arch. Otolaryngol.*, xli, 1, pp. 56–63, 6 figs., 1945.

Sulphanilamide dusted over the plates exerted a marked inhibitory effect on the growth of *Aspergillus fumigatus*, *A. niger*, *A. glaucus*, *A. sydowi*, *Penicillium spinulosum*, and (to a less extent) *Mucor corymbifer*, isolated on a cerumen-agar (1:2) medium from cases of otomycosis at the (United States) Army Air Forces School of Aviation Medicine. At dosages of 20 or 30 to 63 mg. per plate it caused virtually complete cessation of development for periods of up to a fortnight. *Monilia* [*Candida*] *albicans* was unaffected by the compound. Local applications of sulphanilamide should prove beneficial in the treatment of otomycosis except where the last-named fungus is implicated.

474. Delikat (Elizabeth). **Acute pulmonary mycosis: report of a case.**—*Lancet*, ccxlix, 6369, pp. 370–371, 1 fig., 1 graph, 1945.

A case of acute pulmonary mycosis believed to have been caused by *Aspergillus fumigatus* in a 59-year-old night-watchman in an iron works at Wolverhampton is reported, with a supplementary note by S. C. Dyke.

475. Coe (G. C.). **Primary bronchopulmonary aspergillosis, an occupational disease.**—*Ann. intern. Med.*, xxiii, 3, pp. 423–425, 1945.

A case of primary pulmonary aspergillosis (*Aspergillus fumigatus*) is reported in a 47-year-old male worker at the Union Stock Yards, Chicago, where he had been employed for about 20 years at the time of the examination. Proceedings were instituted before the Industrial Commission of the State of Illinois on the basis that the disease was peculiar to the occupation and resulted in an award to the petitioner.

476. Bereston (E. S.) & Waring (W. S.). **Onychomycosis and dermatomycosis caused by Trichophyton rubrum and Aspergillus nidulans.**—*Arch. Derm. Syph., N.Y.*, lii, 3, pp. 162–165, 1945.

A case of onychomycosis and dermatomycosis, associated with joint infection by *Trichophyton rubrum* and *Aspergillus nidulans*, in an officer of the Army of the United States is described. The trouble originated on the left

foot and spread to the left hand and right foot. This is believed to be the first record of *A. nidulans* as an agent of onychomycosis.

477. Sartory (A.) & Sartory (R.). **Un cas d'onychomycose dû à l'Aspergillus fumigatus Fresenius.** [A case of onychomycosis due to *Aspergillus fumigatus* Fresenius.]—*Bull Acad. Méd., Paris*, cix, 27, pp. 482–483, 1945.

Aspergillus fumigatus was isolated on a number of standard media from the nails on the right hand of a 50-year-old farm worker, this being a rare site for the species in question, not known by the writers to have been reported in the relevant literature. The fungus proved highly pathogenic to laboratory animals.

478. Vallery-Radot (P.) & Blamoutier (P.). **Un cas d'asthme par sensibilisation à un 'Aspergillus' développé sur des pieds de Haricots.** [A case of asthma due to sensitization to an *Aspergillus* developed on Bean stems.]—*Bull. Soc. méd. Hôp., Paris*, Sér. 4, lxi, 5–7, pp. 63–64, 1945.

Details are given of a case of recurrent asthma and eczema in an 18-year-old girl, found to be due to working on beans for haricot production, the stems of which were infected by an *Aspergillus* identified by R. Heim as *A. herbariorum* of the *glaucus* group.

479. Fraenkel (E. M.). **Allergy to moulds in England.**—*Brit. med. J., 1945*, 4409, pp. 14–15, 1945.

At the Southern Group Laboratory L.C.C. Park Hospital, the writer has tested 180 allergic cases with six types of mould and a mixture of these in equal parts. Of the total number of patients 120 were asthmatics and the reactions of the first 100 of these have been evaluated statistically, giving percentages of positive results as follows: mixture 66, *Sporotrichum* 65, *Cladosporium* 53, *Penicillium* 44, *Mucor* 40, *Aspergillus* 39, and *Monilia* [*Candida*] 31. These data approximate to those published by Schonvald from Seattle, the geographical position of which on the American continent is similar to that of England in Europe, and it may be presumed that the climatic conditions of the two areas also correspond to some extent.

480. Hampton (S. F.) & Lowe (E. P.). **Air-borne fungi in allergic disease. I. A new method preparation of mold extracts; incidence of skin reactions with mold extracts. A preliminary report.**—*J. Allergy*, xvi, 2, pp. 101–108, 1945.

A new method of preparation of mould extracts for use in skin-testing and injection therapy in allergy is described. Fifty-seven out of 358 patients (15·9 per cent.) suffering from allergic disorders at the Army Air Force Regional Hospital, San Antonio, Texas, and none out of 92 non-allergic subjects showed marked skin reactions when tested intradermally with extracts of the atmospheric moulds, *Alternaria, Hormodendrum, Spondylocladium*, and *Helminthosporium* spp. The relationship of positive skin tests with mould extracts and the actual mould spores encountered by survey in the vicinity of San Antonio is discussed. The practical value of skin-testing with mould extracts in allergy as applied to aviation medicine is described.

481. Watrin (J.), Jeandidier (P.), Michot (J.), & Seyot. **Blastomycose de Gilchrist.** [Gilchrist's blastomycosis.]—*Ann. Derm. Syph., Paris*, Sér. 8, v, 1–2, pp. 27–30, 2 figs., 1945.

Schizosaccharomyces hominis [*Blastomyces dermatitidis*] was isolated on Sabouraud's and other standard media from an 83-year-old farmer suffering from Gilchrist's blastomycosis. A progressive improvement was effected by local treatments with Lugol's solution, subcutaneous injections of blastomycosine (½ c.c. every three days), and oral administration of five tablets daily of iodoseptoplix.

482. Fishman (J.). **Systemic blastomycosis; with a new form of therapy.**—*Nav. med. Bull., Wash.*, xliii, 4, pp. 758–761, 3 figs., 1944.

A case of systemic blastomycosis (*Blastomyces dermatitidis*) in a 19-year-old girl having failed to respond to sulphonamide or iodide therapy, an ether treatment (local and rectal) was substituted which resulted in a cure. An autopsy, performed more than two years later for another condition, revealed no evidence of blastomycosis or toxic effects attributable to the ether.

483. Jones (S. H.) & Klinck (G. H.). **Torula histolytica (Cryptococcus hominis) meningitis: case report and therapeutic experiments.**—*Ann. intern. Med.*, xxii, 5, pp. 736–745, 4 figs., 1945.

A case of meningitis due to *Torula histolytica* [*Cryptococcus neoformans*] in a 50-year-old male patient at the Samaritan Hospital, Troy, New York, is described, together with the results of a post-mortem examination. Neither gentian violet nor thymol exerted any therapeutic effect on the course of the disease, and *in vitro* experiments failed to demonstrate any growth-inhibiting action of sodium sulphadiazine or penicillin on the pathogen.

484. Champion de Crespigny (C. T.). **Torula infection of the central nervous system.**—*Med. J. Aust.*, xxxi (ii), 24, pp. 605–615, 30 figs., 3 graphs, 1944. [*B.H.*, xx, 196.]

Following a review of previous studies on torulosis of the central nervous system, two cases of the disease in male patients, aged 52 and 29 years, are fully described. In the former case, which was much more protracted than the latter, the causal organism, *Torula histolytica* [*Cryptococcus neoformans*], was isolated from the cerebro-spinal fluid. Cultures were not obtained in the second instance, but from the very different reactions of the affected organs it seems probable that another species was implicated.

485. Castellano (T.). **Estudio clínico y anátomo-patológico de un caso de torulosio meningo-encefálica y pulmonar.** [Clinical and anatomo-pathological study of a case of meningo-encephalic and pulmonary torulosis.]—*Rev. Asoc. méd. argent.*, lviii, 546, pp. 1051–1055, 5 figs., 1 graph, 1944.

The clinical syndrome in a case of meningo-encephalic and pulmonary torulosis (*Torula histolytica*) [*Cryptococcus neoformans*] in a 45-year-old woman at the Hospital San Roque, Buenos Aires, is fully described, the diagnosis having been confirmed by mycological and anatomo-pathological studies.

486. Dormer (B. A.), Friedlander (J.), Wiles (F. J.), & Simson (F. W.). **Tumor of the lung due to Cryptococcus histolyticus (blastomycosis).**—*J. thorac. Surg.*, xiv, 4, pp. 322–329, 14 figs., 1945.

A case is presented of a tumour of the lung due to blastomycosis (*Cryptococcus histolyticus* [*C. neoformans*] in a 12-year-old male native at the King George V Hospital for Tuberculosis, Durban, South Africa, which was successfully removed at operation. Secondary meningitis responded favourably to large doses of potassium iodide (90 gm. per diem). The fungus was recovered from the lung tissue of a guinea-pig injected with 1 c.c. of the patient's cerebro-spinal fluid.

487. Allen (V. K.) & Lowbeer (L.). **Rectal ulcers with perirectal fistula as a port of entrance for Torula encephalitis.**—*Sth. med. J.*, xxxviii, 9, pp. 565–569, 4 figs., 1945.

The literature on infections caused by *Cryptococcus hominis* (*Torula histolytica*) [*C. neoformans*] is reviewed, with special reference to meningeal and

cerebral involvement, and further evidence is presented for the frequent occurrence of the organism in the normal gastro-intestinal tract. A case is described in a 44-year-old patient at the Hillcrest Memorial Hospital, Tulsa, Oklahoma, in whom a very large, chronic perirectal abscess and fistulae are believed to have afforded ingress to the fungus.

488. Kaufmann (W.). **Die serologische Differenzierung von Torulopsis neoformans und Torulopsis albida mittels Präzipitation und Agglutination.** [The serological differentiation of *Torulopsis neoformans* and *Torulopsis albida* by means of precipitation and agglutination.]—*Zbl. Bakt.*, Abt. 2, cvi, 20–24, pp. 434–443, 1944.

In a comparative serological study on *Torulopsis* [*Cryptococcus*] *neoformans* and *T. albida* (Saito) Lodder no differences could be demonstrated by precipitation, agglutination, or adsorption experiments, and it is therefore proposed to relegate the latter, together with its var. *japonica*, to a variety of the former as *T. neoformans* var. *albida*.

489. López-Neyra (C. R.), Suárez Peregrín (E.), & Guevara Pozo (D.). **Significación del Blastocystis hominis en la patología humana y nueva teoría de la blastocystización y enquistamiento en los seres unicelulares.** [Significance of *Blastocystis hominis* in human pathology and a new theory of 'blastocystization' and encystment in unicellular organisms.]—*Rev. ibér. Parasitol.*, i, 3, pp. 221–268, 2 pl., 1941. [Received September, 1945.]

Evidence is presented and discussed in favour of the authors' conclusion, based on experience in Granada, that blastocystosis, commonly attributed to *Blastocystis hominis*, actually represents a phase in the life-cycle of the flagellates *Craigia*=*Enteromonas*=*Tricercomonas*.

490. Moro (O.). **Cromomicose.** [Chromomycosis.]—*An. paul. Med. Cirurg.*, xlvii, 4, pp. 281–291, 1944. [*B.A.*, xviii, No. 22184.]

A summary of the etiology and symptomatology of chromomycosis, with details of one case.

491. Prunés (L.) & Frey (J. R.). **Cromoblastomicosis.** [Chromoblastomycosis.]—*Rev. argent. Dermatosif.*, xxvi, 4, pp. 1200–1205, 5 figs., 1944.

Two fungi were isolated on Sabouraud's medium from extensive verrucose lesions on the left foot of a 25-year-old Chilean agricultural labourer, viz., *Oidium* [*Candida*] *albicans* and a species of *Rhodotorula*.

492. Berger (L.). **Étude mycologique du premier cas canadien de chromoblastomycose.** [Mycological study of the first Canadian case of chromoblastomycosis.]—Abs. in *Trans. roy. Soc. Can.*, Ser. 3, xxxviii, p. 161, 1944.

A yeast-like fungus isolated in pure culture from the lesions in a case of chromoblastomycosis (the first to be recorded in Canada) gave rise to pasty, smooth, dark brown or black colonies, and is named *Candida nigra canadensis* n. sp.

493. Berger (L.), Beaudry (M.), & Gaumond (E.). **Chromoblastomycosis due to a new species of fungus (first Canadian case).**—*Canad. med. Ass. J.*, liii, 2, pp. 138–142, 6 figs., 1945. [French summary.]

A black, *Candida*-like fungus, as yet unnamed [see preceding entry], is described as the agent of the first Canadian case of chromoblastomycosis in a 54-year-old cobbler in Quebec. The papillomatous lesions originating on the left hand 14 years before the patient's admission to hospital had spread, probably by auto-inoculation, to other sites.

494. Snow (J. S.), Wedding (E. S.), & Tomlinson (W. J.). **Chromoblastomycosis: report of the first case observed in the Canal Zone.**—*Arch. Derm. Syph., Chicago*, li, 2, pp. 90–93, 3 figs., 1944.

The fungus isolated from verrucose lesions on the left heel of a 74-year-old Jamaican farmer at Ancon, Canal Zone, was identified as *Fonsecaea pedrosoi* var. *communis* [*Hormodendrum pedrosoi*], the entry of which to the tissues was presumably effected through a thorn puncture.

495. Levy (B.) & Black-Schaffer (B.). **Studies in experimental systemic mycosis. I. Systemic chromomycosis (chromoblastomycosis) in Mice: preliminary study.**—*Amer. J. trop. Med.*, xxv, 2, pp. 117–127, 12 figs., 1945.

At the Medical College of Virginia, Richmond, systemic chromomycosis was induced in mice by the intravenous injection of *Hormodendrum pedrosoi*, while intraperitoneal inoculation with the same fungus resulted in the focal form of the disease. The lesions developing in the experimental animals were comparable to those described as typical of human chromomycosis.

496. Azulay (R. D.). **Chromoblastomicose.** [Chromoblastomycosis.]—*Clin. e Lab., Rio de J.*, 69 pp., 10 pl., 1944. [*B.A.*, xix, No. 4989.]

The author reviews in detail a number of cases of chromoblastomycosis, including his own, and after a survey of the literature reduces all previously described species, except *Phialophora verrucosa*, to synonymy with *Fonsecaea* [*Hormodendrum*] *pedrosoi*. Inoculations on rats and guinea-pigs gave successful results only by the intratesticular route.

497. Harant (P.) & Huttel. **Trichosporium pedrosoi, agent d'une mycose végétante d'origine malgache.** [*Trichosporium pedrosoi*, the agent of a vegetating mycosis of Madagascan origin.]—*Bull. Soc. Path. exot.*, xxxvii, 5–6, pp. 188–190, 1944.

Trichosporium [*Hormodendrum*] *pedrosoi* was isolated on chemical media and natural substrata from a suppurating granuloma on the left foot of a 36-year-old Madagascan soldier. Inoculation experiments on animals gave negative results.

498. Arêa Leão (A. E.), Cury (A.), & De Mello (M. T.). **Cromoblastomicose experimental. Formação no pús e no tecido de grãos com clavas (nota previa).** [Experimental chromoblastomycosis. Formation in the pus and tissues of granules with clubs (preliminary note).]—*Brasil méd.*, lix, 46–47, pp. 393–394, 2 figs., 1945. [English summary.]

The pus of lesions developing in rats inoculated with cultures of the agent of a human case of chromoblastomycosis (to be described in a forthcoming publication) contained chestnut-coloured granules with clubs, 8 to 16 μ in length and 1·5 μ in diameter, representing a new morphological feature of the fungus.

499. Peppler (H. J.). **Acid liquid media for the isolation of fungi.**—*Trans. Kans. Acad. Sci.*, xlvi, p. 80, 1943. [Received November, 1945.]

Two liquid media, well buffered at pH 4 to 4·4, have been developed for the routine inoculation and culture of fungi from sputa, gastric lavage specimens, tissue biopsies, pus, and secretions from human sources, e.g., *Coccidioides immitis*, *Trichophyton rubrum*, and *Monilia* [*Candida*] spp. Medium A consists of 10 gm. glucose, 1 ml. each of sodium lactate (10 per cent. solution) and methyl red (0·4 per cent. alcoholic solution), sufficient citric acid (M/10) to

produce a deep pink end point, 0·5 gm. bactotryptose, and 250 ml. tap water; and B of 1 l. sterile or reconstituted skim milk, inoculated with *Streptococcus liquefaciens* or *S. zymogenes*, incubated at 37° C. for five to seven days, filtered through thin layers of absorbent cotton and gauze (or for clearer preparations by suction of the liquid portion through a Buchner funnel fitted with a canvas mat covered with a thin layer of moist filtercel), a volume of tap water equal to the recovered filtrate, and 5 per cent. glucose. Both media are distributed in large test tubes or small Erlenmeyer flasks, steamed for 15 minutes, and stored at room temperature.

500. Marple (C. D.). **Progressive (disseminated) coccidiomycosis: report of a case.** —*Ann. intern. Med.*, xxiii, 2, pp. 240–249, 1945.

A case of disseminated coccidiomycosis (*Coccidioides immitis*) with fatal termination in a 36-year-old male negro at San Quentin, California, is presented. Points of special interest include (*a*) the paraplegia resulting from pressure of an extradural abscess on the spinal cord, (*b*) extensive clinical and laboratory observations, and (*c*) the trial of coccidioidin therapy, resulting in some degree of regression of the fungus.

501. Willett (F. M.) & Weiss (A.). **Coccidioidomycosis in southern California: report of a new endemic area with a review of 100 cases.**—*Ann. intern. Med.*, xxiii, 3, pp. 349–375, 8 figs., 1 graph, 1945.

A new endemic area in southern California has been reported for *Coccidioides immitis*. Of 100 cases in white (51) and coloured (49) soldiers treated at the March Field Station Hospital over a period of one year, four (all in coloured men) assumed the serious disseminated or progressive form, and of these one proved fatal. The coloured patients in general suffered more severely than the white, and required nearly twice as long a period of hospitalization (4,846 as against 2,832 days or a case average of 99 compared with 55·7).

502. Kunstadter (R. H.) & Pendergrass (R. C.). **Primary coccidioidomycosis: a possible pediatric problem.**—*J. Amer. med. Ass.*, cxxvii, 11, pp. 624–626, 1 fig., 1945.

Most of the recent reports on primary coccidioidomycosis (*Coccidioides immitis*) have been concerned with young adults in military service in the United States (three cases are briefly presented here), and the occurrence of the disease in children has not received the attention it merits. Short descriptions of the three phases of the disease, viz., acute, subacute or chronic active, and chronic arrested or healed, are given, followed by directions for diagnosis and a note on prognosis.

503. Lee (R. V.). **Coccidioidomycosis: in the Western Flying Training Command.**—*Calif. west. Med.*, lxi, 3, pp. 133–134, 1944.

The location of the Western Flying Training Command at Santa Ana, California, has afforded an excellent opportunity for the study of coccidioidomycosis [*Coccidioides immitis*] where the disease is endemic. On the basis of the information thus obtained, a classification into three groups is proposed, viz., (1) primary, (2) intermediate (or pulmonary), and (3) advanced (or disseminated). It appears probable that a very high percentage of persons spending six months in the district will contract infection, mostly of the primary (subclinical) type; a maximum of one-sixth of such cases will be diagnosed, and of these some 20 per cent. will show skin lesions and 1 per cent. may be expected to develop the advanced form of the disease, with a mortality of 80 per cent.

504. Denenholz (E. J.) & Cheney (G.). **Diagnosis and treatment of chronic coccidioidomycosis.**—*Arch. intern. Med.*, lxxiv, 5, pp. 311–330, 10 figs., 1944. [*T.D.B.*, xlii, 485.]

This is a full account and discussion of the authors' observations at the Hammond General Hospital, Modesto, California, on 14 actual and 30 suspected cases of chronic coccidioidomycosis (*Coccidioides immitis*) among members of the Army of the United States, the diagnosis in the latter group having been based on a positive cutaneous reaction to coccidioidomycin, which was subsequently not confirmed. In the former group, ten of the patients had contracted the primary benign type of the disease and four the progressive disseminated. Careful clinical studies indicated the relative value and limitations of the recognized diagnostic procedures. Medicinal therapy appears to be usually ineffectual, but rest is an aid to the focalization of infection, and immobilization of the lung by means of a lead shot bag on the chest was helpful in some cases in closing the thin-walled cavities produced by the fungus.

505. Butt (E. M.) & Hoffman (A. M.). **Healed or arrested pulmonary coccidioidomycosis. Correlation of coccidioidin skin tests with autopsy findings.**—*Amer. J. Path.*, xxi, 3, pp. 485–505, 5 pl., 1945.

Coccidioidin skin tests were performed at the Santa Fé Coast Lines Hospital, Los Angeles, California, on 1,165 patients, of whom 302 (25·9 per cent.) reacted positively, the incidence of infection in three major areas serving as sources of infection, viz., San Joaquin Valley, Arizona, and Texas being 62·8, 28, and 35·7 per cent., respectively. Autopsies on eleven positive reactors revealed healed calcified lesions in the lungs, spherules and endospores of *Coccidioides immitis* being found in eight.

506. Schlumberger (H. G.). **A fatal case of cerebral coccidiomycosis with cultural studies.**—*Amer. J. med. Sci.*, ccix, 4, pp. 483–496, 9 figs., 1945.

A fatal case of disseminated coccidiomycosis (*Coccidioides immitis*), with unusually extensive cerebral involvement, is reported in a 21-year-old soldier in the United States Army, who spent a period of five months in the desert regions of Arizona and California. The organism was isolated on Sabouraud's agar in both mycelial and spherule forms, using Gey's roller tube apparatus modified by Conan and Stabler (*Science*, N.S., xciv, p. 569, 1941). Hamsters [*Cricetus frumentarius*] were very susceptible to the fungus, but frogs were refractory. Neither in the patient nor in the experimental animals was mycelial growth apparent. Fifteen additional cases of intracranial infection by *Coccidioides immitis* are listed.

507. De Almeida (F.). **Sôbre o género Pseudococcidioides. Reposta a uma critica feita pelo Prof. O. da Fonseca Filho em seu livro Parasitologia Medica (1943).** [The genus *Pseudococcidioides*. Reply to a criticism by Prof. O. da Fonseca Junior in his book *Medical Parasitology* (1943).]—*Arq. Inst. biol., S. Paulo*, xxvii, 258, pp. 140–142, 1943. [*B.A.*, xviii, No. 22177.]

The author discusses the identity of *Coccidioides immitis* and *Pseudococcidioides mazzai*.

508. Cheney (G.) & Denenholz (E. J.). **Observations on the coccidioidin skin test.**—*Milit. Surg.*, xcvi, 2, pp. 148–156, 1945.

When the coccidioidin skin test was used as an index of infection by *Coccidioides immitis*, 2·8 per cent. of officer personnel in a military hospital in California developed a positive reaction, though no proved clinical case of

pulmonary coccidioidomycosis developed. Repeated after six or twelve months, the positive test decreased in intensity or became negative but of 570 patients evacuated from the south and south-west Pacific only six reacted positively to coccidioidin skin tests and these were patients who had been stationed in endemic areas in the States before embarkation for overseas.

509. Da Silva-Lacaz (C.). **Contribución brasileña para el estudio de la 'blastomicosis sud-americanas'. (Granulomatosis paracoccidioica).** [A Brazilian contribution to the study of the 'South American blastomycoses'. (Paracoccidioidal granulomatosis).]—*Arch. urug. Med., etc.*, xxvii, 2, pp. 167–181, 1945. [English summary.]

In this lecture, delivered at the Institute of Hygiene, Montevideo, on 24th April, 1945, the author reviews the studies of Brazilian doctors on the disease variously known as 'paracoccidioidal granuloma', 'Brazilian blastomycosis', 'Almeida's disease', etc., caused by one or more fungi of the genus *Paracoccidioides*, notably *P. brasiliensis*. The designation 'South American' is preferred to 'Brazilian', since several other countries of South America besides Brazil are known to harbour the disease, the symptomatology, etiology, diagnosis, and therapy of which are summarized. The complement-fixation test, using as antigen a culture filtrate from Sabouraud's liquid medium, was found to be inferior for diagnostic purposes to the microscopic-mycological diagnosis, but appears to possess some value in the determination of the results of specific treatment. Reasonably encouraging results have been achieved in the therapy of paracoccidioidal granuloma by means of sulphanilamides and injections of a vaccine prepared with several strains of the causal organism.

510. Iriarte (D. R.). **Consideraciones sobre paracoccidiosis.** [Considerations on paracoccidiosis.]—*Bol. Lab. Clin. Luis Razetti*, vi, 16, pp. 277–283, 385, 6 figs., 1945.

A brief discussion of Brazilian paracoccidiosis (*Paracoccidioides*) [*brasiliensis*] and its incidence in Venezuela is followed by reports of two cases, both in males, one (a negro) of 32 and the other aged 61. [The same article appears in *Arch. venez. Soc. Oto-Rino-Laringol.*, v, 3, 1944.]

511. Bogliolo (L.). **Contribuição ao conhecimento da morfologia do agente da moléstia de Lutz, em seu ciclo parasitário. Primeira nota.** [Contribution to the knowledge of the morphology of the agent of Lutz's disease in its parasitic cycle. First note.]—*Rev. brasil. Biol.*, v, 3, pp. 321–338, 26 figs., 1945. [English summary.]

Using the technique of silver impregnation, the author studied the morphology of *Paracoccidioides brasiliensis* in 55 cases of Brazilian blastomycosis. He concludes that a variable proportion of the zoospores multiply by budding and not by the production of zoosporangia, so that the formula zoosporangia ⇋naked amoeboid zoospores (cryptospores) is not universally applicable.

512. Taiana (J. A.), Boragina (R. C.), & Niño (F.). **Granuloma paracoccidioidico. Laringobroncoscopia en dos casos.** [Paracoccidioidal granuloma. Laryngo-bronchoscopy in two cases.]—*Rev. Asoc. méd. argent.*, lix, 571, pp. 1356–1360, 10 figs., 1945.

Details are given of two cases of paracoccidioidal granuloma (*Paracoccidiodes brasiliensis*) in male patients, one Brazilian and the other Argentinian, at the Institute of Clinical Surgery, Buenos Aires, together with the results of laryngo-bronchoscopic examinations.

513. Ashburn (L. L.) & Emmons (C. W.). **Experimental Haplosporangium infection.**—*Arch. Path.*, xxxix, 1, pp. 3–8, 1 fig., 1945.

This is a detailed report on the lesions experimentally induced in white mice by inoculation with *Haplosporangium parvum*, which was demonstrated by previous studies to be closely associated with pulmonary coccidioidomycosis (*Coccidioides immitis*) in certain species of wild rodents in Arizona. The animals inoculated with the former organism were as susceptible to the latter three weeks later as the controls.

514. Parsons (R. J.) & Zarafonetis (C. J. D.). **Histoplasmosis in Man: report of seven cases and a review of seventy-one cases.**—*Arch. intern. Med.*, lxxv, 1, pp. 1–23, 1945.

This is a full report of seven cases of histoplasmosis (*Histoplasma capsulatum*) and a review and discussion of a further 71, among the aspects considered being the present status of the disease (which is on the increase, especially in the United States), its incidence and distribution, methods of diagnosis, therapy, and post-mortem observations.

515. Palmer (C. E.). **Nontuberculous pulmonary calcification and sensitivity to histoplasmin.**—*Publ. Hlth Rep., Wash.*, lx, 19, pp. 513–520, 1945.

Of 3,105 student nurses in Detroit, Kansas City, Minneapolis, and Philadelphia given intradermal tuberculin and histoplasmin [vaccine prepared from *Histoplasma capsulatum*] injections, 711 (22·9 per cent.) reacted positively, and 61 (2 per cent.) doubtfully, to the latter substance. Of the total number examined, 294 were affected by pulmonary calcification and were classified in two groups, tuberculin-positive (63 or 21·4 per cent.), and tuberculin-negative (231 or 78·6 per cent.); the former comprised 35 (11·9 per cent.) reacting positively and 8 (2·7) giving a doubtful response to histoplasmin, the corresponding figures for the latter being 198 (67·4) and 8 (2·7), respectively.

516. Emmons (C. W.) & Olson (B. J.). **Studies of the role of fungi in pulmonary disease. I. Cross reactions of histoplasmin.**—*Publ. Hlth Rep., Wash.*, lx, 47, pp. 1383–1394, 1945.

Histoplasmin, blastomycin, coccidioidin, and haplosporangin were prepared by procedures similar to those used in making coccidioidin, and cross-reactions between the four antigens were demonstrated. A dilution of 1:100 histoplasmin induced a positive reaction in guinea-pigs with experimental histoplasmosis (*Histoplasma capsulatum*), blastomycosis (*Blastomyces dermatitidis*), coccidioidomycosis (*Coccidioides immitis*), and haplomycosis (*Haplosporangium parvum*). Out of 136 patients at St. Elizabeth's Hospital, Washington, 34 reacted to both histoplasmin and blastomycin.

517. Levy (B. M.). **Oral manifestations of histoplasmosis.**—*J. Amer. dent. Ass.*, xxxii, 3, pp. 215–220, 2 figs., 1945.

Four cases of oral histoplasmosis are described from the relevant literature. Of the 70 cases known, 20 per cent. showed dental lesions, in most of which *Histoplasma capsulatum* was present. Lesions on the tongue, buccal mucosa, and hard and soft palate should be examined for the fungus.

518. Levy (B. M.). **Chemotherapy of experimental histoplasmosis in White Mice.**—*Amer. J. trop. Med.*, xxv, 3, pp. 241–251, 8 figs., 1945.

Intravenous inoculation of white mice with *Histoplasma capsulatum* was found to be a satisfactory method for the study of histoplasmosis at the Medical College, Richmond, Virginia, and may be used for the observation of

the chemotherapeutic effects of drugs. Sodium iodide, neostam, fuadin, sulphanilamide, proflavin, thymol, B–9, and sodium propionate failed to confer sufficient protection against the fungus.

519. Catanei (A.) & Kervran (P.). **Nouvelle mycose humaine observée au Soudan français.** [A new human mycosis observed in the French Sudan.]—*Arch. Inst. Pasteur Algér.*, xxiii, 3, pp. 169–172, 1945.

Histoplasma capsulatum was isolated from a tumour on the right temporo-maxillary region of a 26-year-old male Algerian native and inoculated into guinea-pigs and mice with positive results. The organism was shown to persist in the apparently healthy spleen for a minimum period of 2½ months.

520. Catanei (A.). **Résultats de l'étude du pouvoir pathogène d'une souche soudanaise d'Histoplasma capsulatum.** [Results of the study of the pathogenic capacity of a Sudanese strain of *Histoplasma capsulatum*.]—*Arch. Inst. Pasteur Algér.*, xxiii, 4, pp. 261–268, 1945.

A strain of *Histoplasma capsulatum* causing facial inflammation in a native of the French Sudan proved to be pathogenic to white mice and guinea-pigs in subcutaneous and intraperitoneal inoculation experiments, the fungus persisting for periods up to 2½ months in the spleen of animals showing a complete clinical cure.

521. Wohlwill (F.) & Morais (D.). **Histoplasmose de Darling. (1 caso observato em Portugal.)** [Histoplasmosis. The first case observed in Portugal.]—*Lisboa med.*, xx, 9, pp. 403–424, 1943. [*B.A.*, xix, No. 4993.]

This paper reports the first case of histoplasmosis [*Histoplasma capsulatum*] in Portugal and the second in Europe. The organism was not isolated. Infection was localized in the urinary bladder with severe cystitis.

522. Beamer (P. R.), Smith (E. B.), & Barnett (H. L.). **Histoplasmosis. Report of a case in an infant with experimental observations.**—*J. Pediat.*, xxiv, 3, pp. 270–280, 6 figs., 1 map, 1944.

The present case of histoplasmosis (*Histoplasma capsulatum*) in an 11-month-old male infant is stated to be the fiftieth record of the disease in man, the tenth in an infant less than 15 months old, and the tenth diagnosed at St. Louis, Missouri, during the past four years [see next entry]. The fungus developed both in the mycelial and yeast-like phases in blood cultures: it appears to be resistant to desiccation and low temperatures (5° to 8° C.), but succumbed to heating in milk at 62° to 63° for 20 minutes.

523. Callahan (W. P.). **Spontaneous histoplasmosis occurring in a Dog.**—*Amer. J. trop. Med.*, xxiv, 6, pp. 363–366, 2 figs., 1944. [*T.D.B.*, xlii, 486.]

The third case of generalized infection in a dog by *Histoplasma capsulatum* is reported, and attention is drawn to the importance of the occurrence of the disease in a pet animal in the St. Louis (Missouri) area, where the fungus is known to be pathogenic to man [see preceding entry]. The bulk of the available evidence suggests either the respiratory or gastro-intestinal tract as the portal of entry.

524. Iams (A. M.), Tenen (M. M.), & Flanagan (H. F.). **Histoplasmosis in children: review of the literature, with report of a case.**—*Amer. J. Dis. Child.*, lxx, 4, pp. 229–240, 5 figs., 1945.

The writers describe a fatal case of histoplasmosis (*Histoplasma capsulatum*) in a female infant at St. Paul, Minnesota, and summarize 20 others from the relevant literature.

525. Carrión (A. L.) & Knott (J.). **Mycetoma by Monosporium apiospermum in St. Croix, Virgin Islands.**—*P. R. J. publ. Hlth*, xx, 1, pp. 84–99, 1944. [*B.A.*, xix, No. 6950.]

Report of a case in St. Croix, Virgin Islands, with a description of *Monosporium apiospermum* [*Allescheria boydii*].

526. Negroni (P.) & Fischer (I[da]). **Pseudallescheria sheari n.gen., n.sp. aislada de un paramicetoma de la rodilla.** [*Pseudallescheria sheari* n. g., n. sp., isolated from a paramycetoma of the knee.]—*Rev. Inst. bact., B. Aires*, xii, 2, pp. 195–204, 7 figs., 1944. [French and English summaries.]

Pseudallescheria sheari n. g., n. sp., isolated from the pus of a tumour on the right knee of a patient at the Rawson Hospital, Buenos Aires, forms a profuse, grey or greenish-grey, velvety or cottony growth on solid media and a pellicle on liquid substrata. The optimum temperatures for vegetative and perithecial development are 37° and 30° C., respectively. Dextrose, galactose, lactose, maltose, sucrose, and raffinose are utilized as sources of carbon, while nitrogen is furnished by peptone, asparagin, and ammonium sulphate. Milk is clotted and peptonized. The globose, fuscous to black perithecia measure 100 to 200 μ in diameter, the piriform asci 21 by 11·5 μ, the short elliptical or oval ascospores 7 to 10 by 3·5 to 7·4 μ, and the piriform conidia 6·2 to 14 by 5·6 to 7 μ.

527. Wood (D. A.). **Maduromycosis of the ankle. Report of case.**—*Calif. West. Med.*, lxii, 3, pp. 119–131, 3 figs., 1945.

A case of maduromycosis [mycetoma] of the melanoid variety involving the left ankle of a 40-year-old Filipino was investigated at a United States Naval Hospital in 1943. Histological examination of the lesion, which had been present for at least seven months, revealed black granules consisting of agglomerated mycelia, interwoven filaments, hyphae, and conidia, and surrounded peripherally by dark-brown pigment. After the surgical excision of the lesion, potassium iodide and sulphathiazole were administered for one week each with beneficial results.

528. Clough (F. E.). **Madura foot.**—*West J. Surg.*, liii, 5, pp. 153–156, 3 figs., 1945.

In connexion with a case of Madura foot [mycetoma] of 12 years' standing in a Mexican agricultural worker who had always resided in California, the author reviews the history, etiology, symptomatology, pathology, and treatment of the disease. At the 1944 session of the California Medical Association four new, unpublished cases originating in the State were discussed, and it appears that a further 43 have been reported from the United States and Canada. According to Brumpt (1936), at least 48 species come into question as potential agents of the disease.

529. Symmers (D.). **Experimental reproduction of maduromycotic lesions in Rabbits.**—*Arch. Path.*, xxxix, 6, pp. 358–363, 5 figs., 1945.

Phialophora jeanselmei, injected subcutaneously into rabbits, produces solitary, non-ulcerative nodules, which are histologically specific and closely comparable to those associated with the form of maduromycosis [mycetoma] in man caused by the same fungus.

530. Emmons (C. W.). **Phialophora jeanselmei comb. n. from mycetoma of the hand.**—*Arch. Path.*, xxxix, 6, pp. 364–368, 2 figs., 1945.

The fungus recently isolated by Symmers and Sporer from mycetoma of the hand [*Med. Mycol.*, *1944*, No. 319], grown on modified Sabouraud's agar

at 30° C., produces deep greyish-olive (Ridgway) colonies with a plush-like texture, reaching a diameter of 22 and a height of 5 mm. in a fortnight. The dark, septate hyphae, 1 to 3 μ in diameter, are often toruloid and the conidiophores tubular (5 to 15 by 1 to 3 μ) or flask- or urn-shaped, and the hyaline or subhyaline, elliptical conidia 1 to 2 by 0·75 to 1 μ. These and other characters of the organism are considered to agree so closely with Langeron's *Torula jeanselmei* [*R.A.M.*, xv, p. 502] as to justify the transference of the latter to the more appropriate genus of *Phialophora* as *P. jeanselmei* n. comb.

531. De Almeida (F.) & Lacaz (C. Da S.). **Notas sôbre algumas questões micológicas.** [Notes on some mycological problems.]—*Arq. Inst. biol., S. Paulo*, xxviii, 261, pp. 57–60, 1944. [*B.A.*, xviii, No. 22178.]

Chiefly a discussion of classification and nomenclature, especially of the genera *Paracoccidioides* and *Candida*.

532. Coutelen (F.) & Cochet (G.). **Étude biologique d'un Cephalosporium, agent pathogène d'une gomme mycosique cervico-maxillaire de l'Homme.** [Biological study of a *Cephalosporium*, the pathogenic agent of a mycotic cervico-maxillary gumma in Man.]—*C.R. Soc. Biol., Paris*, cxxxix, 7–8, pp. 392–393, 1945.

The fungus isolated from the pus of a gum-like consistency in the cervico-maxillary region of a 69-year-old male patient at a Lille hospital was identified as *Cephalosporium acremonium*. Positive results were given by 4 out of 11 inoculation tests on mice and one on a rat.

533. Drake (C. H.). **Natural antibodies against yeast-like fungi as measured by slide-agglutination.**—*J. Immunol.*, l, 3, pp. 185–189, 1945.

A survey was made at the Department of Bacteriology, University of Kansas, of the natural agglutinins against five yeast-like fungi in the sera of 114 humans and 52 rabbits. Of the rabbit sera 81 per cent. reacted with at least one organism, agglutination to the highest titre occurring to the extent of 42 per cent. with *Saccharomyces cerevisiae*, while the corresponding figures for *Candida albicans*, *C. krusei*, and *Torulopsis pulcherrima* were 2, 15, and 4 per cent., respectively. Of the human sera, 95 per cent. reacted with at least one organism, *C. albicans* being most frequently agglutinated to the maximum titre (45 per cent.); the figures for *C. krusei*, *S. cerevisiae*, and *T. pulcherrima* were 1, 11, and 9 per cent., respectively. *Rhodotorula glutinis* was the only one of the five organisms not agglutinated by any of the sera tested. Slides were found to be preferable to tubes for 'yeast' agglutination studies.

534. Sofia (F.). **Pseudo polmonite lobare da Mycotorula bronchialis Castellani.** [Pseudo-lobar pneumonia due to *Mycotorula bronchialis* Castellani.]—*Boll. Soc. ital. Med. Ig. trop.* (Sez. Eritrea), iv, 1, pp. 217–227, 1944.

The author studied a case simulating lobar pneumonia, the morbid agent of which is referred to *Mycotorula bronchialis*.

535. Strickler (A.). **Generalized cutaneous monilial infection.**—*Amer. J. Dis. Child.*, lxviii, 6, pp. 382–384, 2 figs., 1944.

Monilia [*Candida*] *albicans* was isolated from the scalp, eyebrows, and nails of a two-year-old girl at Philadelphia suffering from chronic generalized moniliasis.

536. Wessler (S.) & Browne (H. R.). **Candida albicans (Monilia albicans) infection with blood stream invasion; report of a case with a strain clinically resistant to sulfonamide drugs and to penicillin in vitro.**—*Ann. intern. Med.*, xxii, 6, pp. 886–889, 1945.

An account is given of a case of systemic moniliasis in a 43-year-old railwayman at the Albany Hospital, Albany, New York, believed to be the first in which the associated organism, *Candida albicans*, has been demonstrated in the blood stream during life. The patient responded favourably to sodium iodide therapy, but the fungus was still present in the system four months after his discharge from hospital.

537. Coutelen (F.) & Cochet (G.). **Les rongeurs domestiques, réservoirs de virus en mycopathologie humaine et vétérinaire.** [Domestic rodents, reservoirs of virus in human and veterinary mycopathology.]—*Ann. Parasit. hum. comp.*, xix, 1–3, pp. 85–95, 1942. [Received April, 1945.]

Among the 46 strains, 11 species, and four mycological varieties belonging to six genera, isolated from the intestinal tract of various domestic rodents at the Laboratory of Parasitology, Paris, were *Candida albicans* (rabbit, guinea-pig, and rat), *C. parakrusei* (rabbit), and *C. brumpti* (rat), of which the two latter had hitherto been known only as human parasites.

538. Catanei (A.). **Étude des caractères morphologiques et biologiques des champignons levuriformes isolés chez l'Homme en Algérie.** [Study of the morphological and biological characters of the levuriform fungi isolated from Man in Algeria.]—*Arch. Inst. Pasteur Algér.*, xxiii, 1, pp. 45–49, 1945.

The 26 isolations of *Candida* from human sources in Algeria studied by the author fell into five groups, represented by the species *C. albicans*, originating in various regions of the buccal cavity and respiratory system; *C. tropicalis* in pilose tongue (black or otherwise) and in sputum; *C. pseudotropicalis* (sputum); *C. parakrusei* in sputum, epidermal squamae, and pus of superficial lesions; and *C. brumpti* on the skin or scalp.

539. Raubitschek (F.). **A new fermentation method for mycological identification.**—*J. Bact.*, l, 3, pp. 337–339, 1 fig., 1945.

The method described was devised at the Rothschild Hassadeh University Hospital, Jerusalem, for the determination of sugar fermentation by the species of *Candida* responsible for skin affections, including *C. albicans* and *C. brumpti*.

540. Fuentes (C.), González (A.), & Madiedo (O.). **Aislamiento e identificación de la Monilia albicans.** [Isolation and identification of *Monilia albicans*.]—*Rev. Med. trop., Habana*, xi, 3–4, pp. 42–45, 4 figs., 1945.

The writers describe the results of their application of the various methods recommended in the relevant literature for the isolation and identification of *Monilia* [*Candida*] *albicans*, e.g., cultural and morphological characters, biochemical reactions, and pathogenicity to laboratory animals. A system of classification is proposed based on a combination of these procedures. The strain under observation was isolated from a case of vaginitis.

541. Karnaky (K. J.). **At what pH does pathogenic Monilia albicans grow best?**—*West J. Surg.*, liii, 11, pp. 390–391, 1 fig., 1945.

A study of the relation of the hydrogen-ion concentration of the substratum to the development of *Monilia* [*Candida*] *albicans* in connexion with the treatment of vaginitis due to this cause at the Jefferson Davis Hospital, Houston, Texas, showed that profuse growth was made over a range extending from pH 3·9 to 10·82.

542. Marks (M. B.). **Penicillin treatment of oral inflammations in childhood.**—*J. Pediat.*, xxvi, 6, pp. 582–585, 1945.

Two cases are reported of the successful therapy of thrush (*Saccharomyces* [*Candida*] *albicans*) in female infants at Miami Beach, Florida, by the administration of penicillin (intramuscular in one patient and local in the other).

543. Finnerud (C. W.). **Perlèche—its nosologic status.**—*J. Amer. med. Ass.*, cxxvi, 12, pp. 737–740, 1944.

The maceration and transverse fissuring of the oral commissures, commonly known as 'perlèche', may arise from a number of causes, including fungal infection, mostly by *Monilia* [*Candida*] spp.

544. Iriarte (D. R.). **Faringomicosis a Candida (Monilia) albicans.** [Pharyngeal mycosis due to *Candida* (*Monilia*) *albicans*.]—*Bol. Lab. clin. Luis Razetti*, iii, 10, pp. 177–178, 1 fig., 1943.

Candida albicans was identified as the agent of pharyngeal mycosis in a 20-year-old male patient at the Hospital Vargas, Caracas, Venezuela.

545. Tumulty (P. A.) & Michael (M.). **Monilial pharyngitis.**—*War Med.*, viii, 3, pp. 167–173, 2 figs., 1945.

Monilia [*Candida*] *albicans* was isolated in pure culture from the throats of 18 healthy young soldiers of the Army of the United States. In five cases the fungus appeared to be entirely responsible for the production of an acute pharyngitis, clinically indistinguishable from that caused by beta haemolytic streptococci or *Corynebacterium diphtheriae*; in three its etiological role could not be determined because of the presence of streptococci; and in the remainder no evidence of pathogenicity could be obtained.

546. Wylie (P. E.) & De Blase (J. A.). **Broncho-pulmonary moniliasis.**—*J. Amer. med. Ass.*, cxxv, 7, pp. 463–465, 6 figs., 1944.

Diagnosis of bronchitis in a 30-year-old soldier of the Army of the United States was made initially on clinical and radiological findings. The yeast-like odour of the sputum suggested mycosis. Diagnosis of moniliasis was made by smears, cultures, and animal inoculation, all of which yielded *Monilia* [*Candida*] *albicans*. Sodium iodide administered intravenously and potassium iodide orally proved beneficial.

547. Magarinos Torres (C.), Arêa Leão (A. E.), & Salles (J. F.). **Gastrite espontânea do Camondongo e cogumelos do gênero Geotrichum Link.** [Spontaneous gastritis of the Mouse and fungi of the genus *Geotrichum* Link.]—*Mem. Inst. Osw. Cruz*, xxxix, 1, pp. 97–103, 7 figs., 1943. [English summary. Received August, 1945.]

Geotrichum spp. were associated with slight catarrhal gastritis in apparently healthy white mice at the Oswaldo Cruz Institute, Rio de Janeiro, a matter of practical importance in view of the extensive use of these animals in experimental work on nutrition.

548. Colonnello (F.). **Il Geotrichum candidum quale ospite dell' organismo umano.** [*Geotrichum candidum* as harboured by the human organism.]—*Atti Ist. bot. Pavia*, Ser. 5, iii (3), pp. 197–224, 1944.

A cultural, micromorphological, and biochemical study of eight strains of *Geotrichum* isolated from the digestive tract of healthy persons and those suffering from intestinal complaints, in one case complicated by thrush, showed that all were referable to *G. candidum*. The pathogenicity of this fungus, as of *G. matalense* (the only other species which the author regards as belonging to the genus), is practically nil.

549. Joulia (P.) & Lecoulant (P.). **Les balanoposthites mycosiques à champignons levuriformes.** [Mycotic balanoposthitis caused by yeast-like fungi.]—*Ann. Derm. Syph., Paris, 1944*, 5–6, pp. 127–135, 2 figs., 1944. [Received 1945.]

This is a description, supplemented by particulars of two cases, of various forms of balanoposthitis caused by yeast-like fungi.

550. Cochet (G.). **Propriétés physiologiques d'Arthrographis langeroni Cochet 1939, agent pathogène d'une onychomycose humaine.** [Physiological properties of *Arthrographis langeroni* Cochet 1939, pathogenic agent of a human onychomycosis.]—*Ann. Parasit. hum. comp.*, xix, 4–6, pp. 157–159, 1942–3.

The following are among the physiological properties of *Arthrographis langeroni*, an agent of human onychomycosis in France: utilization of glucose, galactose, maltose, and raffinose (the two latter slightly and slowly) as sources of carbon; of peptone as the sole source of nitrogen; and the formation of a black pigment in the medium after a month's growth.

551. Epstein (S.). **Examination of nails for fungi.**—*Arch. Derm. Syph., N.Y.*, li, 3, p. 209, 1945.

The use of an electric drill, as recommended by Kile and Welsh (*Arch. Derm. Syph., N.Y.*, xlii, 12, p. 1123, 1940) for the treatment of trichophytosis, has also been found helpful in the diagnosis of onychomycosis. After removal of the outer portion of the nail, the dust from the cleaner underlying area is collected on a slide or in a Petri dish for culture. The finely ground material may be readily examined microscopically after treatment with potassium hydroxide, since the particles are large enough to permit the demonstration of mycelium.

552. Sartory (A.) & Sartory (R.). **Un cas d'onychomycose dû à une espèce du genre Acremoniella (Allescheriella) A. unguis n. sp.** [A case of onychomycosis due to a species of the genus *Acremoniella* (*Allescheriella*) *A. unguis* n. sp.]—*C. R. Acad. Sci., Paris*, ccxviii, 20, pp. 807–808, 1944.

The name of *Acremoniella unguis* n. sp. is proposed for a fungus isolated from the nails of a 44-year-old woman. The optimum growth was made at 30° to 34° C. The septate, cylindrical conidiophores measure 2·2 to 4 μ in diameter, and the piriform, mahogany-coloured conidia 8 to 11 μ in diameter.

553. Sharp (H. S.) & Biggs (R.). **A case of rhinosporidiosis.**—*J. Laryngol. Otol.*, lix, 12, pp. 457–458, 1 fig., 1944.

The fungus associated with a long-standing nasal polypus in an Indian serving in the British Army and resident in England since 1937 was identical in its microscopic appearances with *Rhinosporidium seeberi*, but isolation and animal inoculation attempts were unsuccessful.

554. Di Pietro (A.). **Granuloma nasal a Rhinosporidium seeberi (8ª observación argentina).** [Nasal granuloma due to *Rhinosporidium seeberi* (8th Argentinian observation).]—*Rev. Asoc. méd. argent.*, lix, 560, pp. 704–707, 6 figs., 1945.

Details are given of a histological examination of a nasal tumour caused by *Rhinosporidium seeberi* in a 49-year-old female patient at the Juana C. de Cabral Hospital, Villa Angela, Chaco, Argentina.

555. Park (R. G.). **Chronic skin infections in the Forces.**—*N. Z. med. J.*, xliii, 234, pp. 130–135, 1944.

Among the most prevalent chronic dermatoses in 200 cases investigated at a military hospital in the Middle East were various manifestations of the

Pityrosporon of Malassez [*Pityrosporum ovale*], tinea cruris, tinea pedis, and intertrigo of monilial origin [*Candida*]. The relationship of disorders of this type to underlying etiological factors—internal, external, and constitutional—is discussed.

556. Warren (L.). **Military dermatology.**—*Ann. intern. Med.*, xx, 3, pp. 395–404, 1944.

Superficial fungus infections, including athlete's foot, and various types of ringworm, constitute one of the most important groups of skin diseases encountered among United States military personnel. Recommendations are made for the therapy of the disorders by the application of some standard remedies, of which wet dressings, e.g., of boric acid, aluminium acetate (Burow's solution), or potassium permanganate, are most appropriate to the acute stage of inflammation, while Army issue foot powder, Castellani's paint, and Whitfield's ointment may be used when vesiculation has largely subsided.

557. Delaney (J. R.). **Observation of skin diseases in the Tropics.**—*Nav. med. Bull., Wash.*, xlii, 5, pp. 1117–1118, 1944.

Fungus infections were the most common of the skin disorders observed by the writer among United States naval personnel in the South Pacific, both at the base hospital and two advance posts in the combat area, affecting at least 80 per cent. of the patients who had been serving for three months and upwards. Infections involving the abdomen, perineum, and inner aspects of the thighs responded favourably to the application of 24 per cent. sulphur in aquaphor.

558. Cohen (T. M.). **Dermatologic therapy in the Tropics.**—*Nav. med. Bull., Wash.*, xlii, 5, pp. 1119–1123, 1944.

Dermatomycoses constituted 36·6 per cent. of the 1,300 cases of skin disease in personnel of the United States Navy treated over a three-month period in the South Pacific Zone. Continuous wet dressings of Burow's solution (1 in 30), saturated boric acid, or potassium permanganate (1 in 15,000) were applied to acute inflammations, followed by alternations of wet dressings and boric acid ointment, and on the commencement of exfoliation by a mixture of salicylic and benzoic acids (1 and 2 gm. or c.c., respectively), ichthyol (1 gm.), and sufficient water in an oil emulsion base to make up a total of 100 gm. or c.c. A suitable preparation for the therapy of seborrhoeic dermatitis consists of 3 gm. or c.c. salicylic acid, 5 gm. precipitated sulphur, 1 gm. duponol, and water to bring up to a total of 100 gm. or c.c.

559. Peck (S. M.). **Prevention of epidemics of dermatitis in industry, including dermatophytosis.**—*J. Mich. med. Soc.*, xliii, 7, pp. 568–574, 1944.

Some general hygienic precautions are suggested for the prevention of outbreaks of industrial dermatitis, which are attributed in the main to chemical agents, in the United States, bacteria and fungi playing a subordinate part.

560. Peck (S. M.) & Schwartz (L.). **Is dermatophytosis a significant occupational health problem?**—*Amer. J. publ. Hlth*, xxxv, 6, pp. 621–624, 1945.

From their extensive investigations on the relation of dermatophytosis to absenteeism among industrial workers in the United States, the writers conclude that loss of time from this source in unimportant. Two other questions arising in connexion with the inquiry, namely, whether dermatophytosis is an industrial disease, and if a fungal infection predisposes to industrial dermatoses, are similarly answered in the negative. In conclusion eight criteria are given for the differentiation of 'phytids' from occupational dermatoses.

561. Lewis (G. M.). **Common fungous diseases of the skin and their treatment.**—*Clinics, Philad.*, iii, 4, pp. 849–855, 1944.

This is a discussion of some forms of ringworm prevalent in the United States, emphasizing their clinical features and the standard remedies employed in their therapy.

562. Savage (J.). **Dermatology on active service. With a plea for re-organization of the Skin Department.**—*J. roy. Army med. Cps*, lxxxiii, 5, pp. 246–248, 1944.

In the course of the Tunisian campaign (March to May, 1943), the writer examined a number of cases of mycotic infection, which represented 7·5 per cent. of the total of 1,298 patients admitted to hospital for skin disorders. Epidermophytosis of the feet was particularly prevalent and refractory to treatment, relapses being frequent and the period of convalescence prolonged.

563. Fasal (P.). **Cutaneous diseases in the tropics : a clinical study based on observations in Malaya.**—*Arch. Derm. Syph., N.Y.*, li, 3, pp. 163–171, 7 figs., 1945.

Among white persons in Malaya fungi were found to be responsible for dermatophytosis of the feet, known as 'Singapore foot', and eczema marginatum (tinea cruris) or 'dhobie itch', associated in some cases with *Trichophyton inguinale* [*Epidermophyton floccosum*]. Tinea versicolor (*Microsporum* [*Malassezia*] *furfur*) was prevalent among natives, who also occasionally suffered from tinea imbricata [*T. concentricum*], 'Singapore ear', a fungal infection of the external auditory meatus, and 'piedra' (*Trichosporum giganteum*), the last-named likewise affecting Caucasians.

564. Wolfe (W. D.). **Diseases of the skin among the natives of north east New Guinea.**—*Arch. Derm. Syph., N.Y.*, lii, 4, pp. 247–248, 1945.

Tinea of various types was one of the most prevalent skin diseases in a random group of 1,047 natives of north-east New Guinea, affecting 200 (19·1 per cent.) of the persons examined. Most of the disorders were similar to those occurring in the United States, one of the exceptions being tinea imbricata [*Trichophyton concentricum*].

565. Duemling (W. W.). **Cutaneous diseases in the South Pacific : observations among military forces.**—*Arch. Derm. Syph., N.Y.*, lii, 2, pp. 75–86, 5 figs., 1945.

During the year previous to the time of writing, 5 per cent. of all admissions to the Naval hospital attended by the author, where large numbers of men returning from the south-west Pacific are treated, were to the dermatological service, and of this proportion 20 per cent. were for fungus diseases of the skin, mostly *Epidermophyton* [*Trichophyton*] infections. The hands and feet were the principal sites involved, and the condition was frequently accompanied by lymphangitis and regional lymphadenopathy; cases of tinea cruris [*E. floccosum*] also occurred. Pityriasis versicolor [*Malassezia furfur*] was another of the disturbances encountered. Therapeutic measures are indicated.

566. MacKenna (R. M. B.). **On military dermatology.**—*Brit. med. Bull.*, iii, 7–8, pp. 158–161, 1945.

Among the aspects of military dermatology discussed in the light of the author's experience in the British Army are the incidence of skin disease in the Boer war and the wars of 1914–18 and 1939–45, the organization of a dermatological service, military disposal of men with skin disease, preventive dermatology, importance of prognosis, speed of treatment, and the

maintenance of contact with new developments. Tinea pedis is placed last in a list of skin diseases arranged in order of importance, and the writer has good reason to believe that its frequency has been exaggerated.

567. Hellier (F. F.). **Dermatological conditions of the feet.**—*Med. World*, lxi, 12, pp. 356–358, 360–361, 1944.

Some common skin disorders affecting the feet of soldiers in the British Army are described, including ringworm (epidermophytosis), with recommendations for their treatment.

568. Weidman (F. D.), Emmons (C. W.), Hopkins (J. G.), & Lewis (G. M.). **The war and dermatophytosis with special reference to treatment and fungicide testing.**—*J. Amer. med. Ass.*, cxxviii, 11, pp. 805–809, 1945.

The writers' investigations on dermatophytosis as a military problem, which were financed by certain Government agencies and the Council on Pharmacy and Chemistry of the American Medical Association, and covered a period of two years, are summarized under the headings of etiology, prophylaxis, treatment, standards for *in vitro* fungicide testing, evaluation of fungicides for clinical use, scope of sensitization in dermatophytosis, industrial mycoses in war-time, and self-treatment.

569. Dolce (F. A.). **Mycotic infections of the feet among soldiers.**—*Milit. Surg.*, xcvii, 2, pp. 152–154, 1945.

Mycotic infections of the feet represented 11·3 per cent. (230) of 2,020 cases admitted to the Dermatological Clinic, Seymour-Johnson Field (Army of the United States), 91 (39·5 per cent.) of the patients requiring hospitalization, with an average time loss of 13·7 days. Details are given of the therapeutic methods applied in the various phases of infection.

570. Hopkins (J. G.), Hillegas (A. B.), Camp (E.), Ledin (B.), & Rebell (G.). **Treatment and prevention of dermatophytosis and related conditions.**—*Bull. U.S. Army med. Dep., 1944*, 77, pp. 41–53, 1944. [*B.A.*, xviii, No. 22183.]

Among factors causing inflammation of the skin in 'athlete's foot' among military men were mycotic infections due to *Trichophyton gypseum*, *T. purpureum*, *Epidermophyton inguinale* [*E. floccosum*], or *Monilia* [*Candida*] *albicans*. These fungi were found in about 70 per cent. of cases of intertrigo of the toes and in over 90 per cent. of dyshidrotic lesions on the soles. Inspection of troops revealed lesions of probable dermatophytosis in at least 80 per cent., while microscopic examination showed the presence of fungus on the feet of 30 to 50 per cent. of the men.

571. Lomholt (S.). **Nogle almindelige Svampelidelser og deres Behandling.** [Some common fungal ailments and their treatment.]—*Nord. Med.*, xxviii, 47, pp. 2439–2442, 1945.

The clinical features of some fungal ailments prevalent in Denmark, including various types of epidermophytosis, blastomycosis, onychomycosis, trichophytosis, kerion, pityriasis versicolor [*Malassezia furfur*], and erythrasma [*Actinomyces minutissima*], are described and recommendations for their treatment given.

572. Lane (C. G.), Rockwood (Ethel M.), Sawyer (C. S.), & Blank (I. H.). **Dermatoses of the hands.**—*J. Amer. med. Ass.*, cxxviii, 14, pp. 987–993, 2 diags., 1945.

Fungi appeared to be of negligible importance in the etiology of dermatoses of the hands in a group of 475 patients (329 females and 146 males) of various occupations attending a Boston (Massachusetts) clinic.

573. Muende (I.). **Mycology of the skin.**—*Brit. med. Bull.*, iii, 7–8, pp. 164–167, 1945.

A brief note on the history of dermatomycosis is followed by a discussion of problems of classification, a plan of investigation, short descriptions of the various sites and types of lesions, a note on the technique for examining infected material, a synoptic table for the identification of common fungus infections, observations on the appearance of fungi in scales and hairs, and directions for the inoculation of media and the microscopic examination of cultures.

574. Montgomery (R. M.) & Casper (Esther A.). **Cutaneous manifestations of the fungi causing dermatophytosis and onychomycosis.**—*J. Amer. med. Ass.*, cxxviii, 2, pp. 77–83, 8 figs., 1945.

In New York the majority of cases of dermatophytosis are caused by *Trichophyton gypseum*, which was responsible for 65·4 and 12·2 per cent. of foot and hand infections, respectively, at the Skin and Cancer Unit of the Post-Graduate Medical School and Hospital from 1935 to 1943, the corresponding figures for *T. purpureum*, *Monilia* [*Candida*] *albicans*, and *Epidermophyton inguinale* [*E. floccosum*] being 15·7 and 28·7, 13·5 and 55·1, and 2·8 and 2, respectively. The incidence of the same fungi in relation to onychomycosis of the toe- and finger-nails over the same period was as follows: *T. gypseum* 63·5 and 2, respectively, *T. purpureum* 25·3 and 8·1, *C. albicans* 5·6 and 89·2, and *E. floccosum* 0 and 0. The symptomatology of the conditions associated with the various fungi is described and therapeutic measures indicated.

The authors were informed, in a personal communication from M. B. Sulzberger, that the United States Navy hospitalized 14,068 patients for dermatomycoses between 1940 and 1943, representing a loss of 251,418 days of active service or 17·1 per cent. of sick leave for all skin diseases.

575. Duncan (J. T.). **Cultivation and identification of ringworm fungi.**—*Mon. Bull. Minist. Hlth*, iv, May, pp. 93–96, 1945.

Three procedures may be employed, separately or in conjunction, in the diagnosis of ringworm, viz., (*a*) clinical examination with or without the aid of Wood's lamp, (*b*) microscopic inspection of hair, skin, or nail materials for the presence of the causal organism, and (*c*) cultivation, isolation, and specific identification of the agent. From materials originating in the above-mentioned sites in unselected human cases of ringworm in different parts of England 256 cultures were isolated, of which 154 belong to 'animal' and 111 to 'human' types. The genus *Microsporum* is represented by 211 cultures, of which 122 are 'animal' (*M. felineum* 74, *M. lanosum* 48) and 89 'human' (*M. audouini*). Other genera include 32 'animal', namely, *Trichophyton asteroides* 16, *T. persicolor* 2, *T. discoides* 9, *T. rosaceum* 4, and *Achorion quinckeanum* 1, and 22 'human', i.e., *Epidermophyton floccosum* 9, *A. schoenleini* 7, *T. tonsurans* 4, and *T. sabouraudi* and *T. rubrum* one each. The technique of culture is expounded and brief descriptions given of the microscopic morphology of the ringworm fungi on maltose agar.

576. Thomas (B. A.), Lennox (Mary), & Duncan (J. T.). **The role of animal-type dermatophytes in human ringworm.**—*Brit. med. J.*, *1945*, 4419, pp. 346–349, 1945.

The position of ringworm infection with animal-type dermatophytes in Great Britain is reviewed, and some well-authenticated cases of the transmission of the disorder from animals to man are described. An account is given of a recent outbreak in which five persons were directly, and four indirectly,

infected by *Microsporum lanosum* from a puppy, the association being confirmed by cultural investigation. An additional 21 cultures from 45 unselected cases in the immediate vicinity and farther afield yielded *M. felineum* (5), *M. audouini* (4), *Trichophyton tonsurans* (1), *T. asteroides* [*T. mentagrophytes*] (10), and *T. discoides* (1), the clinical observations relating to which are described. In a discussion of the therapy of tinea tonsurans of animal-dermatophyte origin the importance and practicability of conservative methods are emphasized.

577. Sharp (W. B.). **Serologic relationship among the dermatophytes.**—*Tex. Rep. Biol. Med.*, iii, 2, pp. 159–169, 1945.

Dermatophytes of the genera *Microsporum* (*M. lanosum*, *M. audouini*, and *M. gypseum*), *Trichophyton* (*T. mentagrophytes*, *T. rubrum*, and *T. cerebriforme*), and *Epidermophyton* (*E. floccosum*) were shown by their precipitin reactions to possess a common antigen, demonstrating interrelationship. Relative titre establishes certain distinctions within the ringworm group, but not with sufficient accuracy for satisfactory subclassification. *M. lanosum* and *M. audouini* exhibit a close affinity differentiating them from other dermatophytes. Different strains of a given species of dematophyte react mutually to notably high titre, thereby affording aid in identification.

578. Leise (J. M.) & James (L. H.). **An alkaline medium and procedure for the selection of dermatophytes in the presence of saprophytic fungi.**—*J. Lab. clin. Med.*, xxx, 2, pp. 119–131, 1 fig., 1945.

Mixed suspensions of saprophytes and dermatophytes (*Epidermophyton floccosum*, *Trichophyton interdigitale*, and *T. gypseum*) plated in Sabouraud's maltose agar adjusted to pH 10·5 produced ample growth of the latter group to permit isolation. A temperature of 34° C. favoured incubation, and the plates should be examined after 5½ or up to 10 days.

579. Jadassohn (W.) & Fierz (H. E.). **Pilzkulturen auf Löschpapier.** [Fungus cultures on blotting-paper.]—*Experientia*, i, 6, pp. 196–197, 1 fig., 1945. [English summary.]

Agar being difficult, and crude maltose, etc., almost impossible to obtain in Switzerland under existing conditions, the writers have carried out successful experiments in the culture of dermatophytes in tubes containing strips of blotting-paper, 10 by 1 cm., with the base dipped in beer wort solution. Antimycotic preparations to be tested may be incorporated with the cultures with the addition of acetone (14 drops per strip) in the case of those insoluble in water.

580. Robbins (W. J.) & Ma (Roberta). **Growth factors for Trichophyton mentagrophytes.**—*Amer. J. Bot.*, xxxii, pp. 509–522, 8 figs., 1945.

The authors report the results of a very detailed study on the physiology of *Trichophyton mentagrophytes*, a culture of which was isolated from a human subject and maintained in a freely sporulating condition by frequent transfers. Mutant or pleomorphic forms were isolated and their physiology studied. No reversion to the normal was observed.

581. Levin (O. L.) & Behrman (H. T.). **A distinctive but frequently unrecognized variety of ringworm of the skin.**—*J. Mt Sinai Hosp.*, xii, 1, pp. 457–463, 5 figs., 1945.

Some of the features of the form of ringworm due to *Trichophyton purpureum* are stated to be so distinctive as to enable a trained observer to make an

etiological diagnosis from the clinical data. A typical case is described in a 41-year-old female patient at the Mount Sinai Hospital, New York, in whom the red, scaling patches on the hands, feet, and anterior aspects of the leg gradually expanded and spread to the forearms, arms, and thighs. Progressive improvement followed repeated applications of a solution containing 5 per cent. salicylic acid and 2 per cent. thymol, and an ointment consisting of soft soap, resorcinol, and sulphur. The nails were benefited by copper sulphate iontophoresis and salicylic acid plasters.

582. Lima Carneiro (A.). **O Trichophyton violaceum Bod. a sua freqüência em Portugal.** [*Trichophyton violaceum* Bod. and its frequency in Portugal.]—*Bol. Soc. broteriana*, Ser. 2, xix, 1, pp. 323–325, 1944.

Trichophyton violaceum has been shown by the author's observations and a perusal of the relevant literature to be the predominant agent of dermatomycoses in Portugal, accounting for 42·8 per cent. of the cases reported. It is highly refractory to therapeutic measures, and, unlike other dermatophytes of the same group, does not regress spontaneously at adolescence but may attack adults of 35 to 50 years.

583. Levin (O. L.) & Behrman (H. T.). **The problem of non-fluorescent ringworm of the scalp : a warning.**—*J. Amer. med. Ass.*, cxxviii, 5, pp. 350–352, 1945.

In connexion with the protracted epidemic of ringworm of the scalp in New York, attention is drawn to the fact that not all infections of this type impart a noticeable fluorescence to the diseased hairs, so that a negative examination under Wood's light is not a sufficient reason to exclude suspected cases. One of these, in a seven-year-old boy, is briefly reported, in whose scalp repeated Wood's light had disclosed no abnormalities. However, the same technique applied at the Mount Sinai Hospital eventually revealed a dull white, inconspicuous fluorescence, and cultures of the affected hairs gave rise to *Trichophyton crateriforme*. The available knowledge concerning the various types of fungi responsible for ringworm is summarized.

584. Goodman (H.). **Convenient source of fluorescing radiation in the study of the skin.**—*Urol. cutan. Rev.*, xlviii, 9, pp. 438–439, 1 fig., 1944.

In connexion with the examination under fluorescent light of the scalp, hair, etc., of children suffering from ringworm, attention is drawn to a recent advance in technique, consisting of an incandescent bulb combining ultraviolet radiation with some visible violet. Operated on either direct or alternating current from any light socket, the Westinghouse Purple X, 250-watt, A21 screw-box bulb imparts a fluorescent appearance to the skin. A special reflecting wire cage affords protection to doctor and patient without obscuring the radiation.

585. Dennison (A. D.). **Treatment of dermatologic conditions aboard a destroyer.**—*Nav. med. Bull., Wash.*, xlv, 3, pp. 524–529, 1945.

Directions are given for the treatment by standard remedies of trichophytosis and dermatophytosis on board a destroyer.

586. Laymon (C. W.). **Ringworm of the scalp.**—*Minn. Med.*, xxviii, 5, pp. 363–367, 2 figs., 1945.

In connexion with an alarming increase in the incidence of scalp ringworm (*Microsporum audouini*) in Minnesota, the writer recapitulates the proposals of Lewis *et al.* for combating a similar epidemic in New York [*Med. mycol.*, No. 365].

587. Spencer (G. A.). **Ringworm infection of the scalp in the Harlem area; discussion of present inadequate methods of control.**—*N.Y. St. J. Med.*, xliv, 13, pp. 1486, 1488, 1490, 3 figs., 1944.

Scalp ringworm (*Microsporum audouini* and *M. lanosum*, the former predominating) has assumed quasi-epidemic proportions in the Harlem negro quarter of New York City, and hitherto no active steps have been taken by public or private agencies to combat the trouble. The author's recommendations include the establishment of centres for diagnosis of suspected cases by the use of filtered ultra-violet rays; cultural studies to identify the type of organism involved; a superficial X-ray unit for the treatment of *M. audouini* infection; and the education of private persons and public bodies to understand the importance of the disorder and co-operate in its control.

588. Gaul (L. E.). **Ringworm of the scalp due to Microsporon audouini.**—*J. Iowa St. med. Soc.*, xxxv, 7, pp. 253–255, 1945.

In connexion with two cases of ringworm of the scalp (*Microsporum audouini*) at Dubuque, Iowa, one in a 56-year-old female and the other in her eight-year-old grandson (the source of infection), the importance of Wood's light as an aid to diagnosis is emphasized.

589. Negroni (P.) & Bonfiglioli (H.). **Piedra blanca de las extremidades de los pelos producida por Trichosporon ribeiroi.** [White piedra of the hair tips caused by *Trichosporon ribeiroi*.]—*Rev. argent. Dermatosif.*, xxviii, 4, pp. 487–494, 4 figs., 1944. [*T.D.B.*, xlii, 586.]

The authors describe a peculiar type of 'piedra' of the scalp affecting only the hair tips. The nodules, suggestive of louse nits, each consisted of a colony of a hyaline fungus, which in culture presented the characters of a species of *Trichosporum* with arthrospores 6·9 to 9·9 by 2·5 to 3·3 μ, blastospores 4·5 to 7·6 by 3·3 μ, and blasto-arthrospores 6·6 to 4·1 μ. On the hair the smooth-walled, hyaline arthrospores measured 3·3 to 4·9 μ. It is regarded as a new species and named *T. ribeiroi* Moraes.

590. Arêa Leão (A. E.). **Consideracões sôbre os Thallosporados. O gênero Trichosporon. 'Trichosporon minor' n. sp. produtor da piedra axilar.** [Considerations on the Thallosporales. The genus *Trichosporon*. '*Trichosporon minor*' n. sp., the agent of axillary 'piedra'.]—*Mem. Inst. Osw. Cruz*, xxxv, 4, pp. 729–745, 6 pl., 1940. [Received August, 1945.]

The author has made a study of the genus *Trichosporon* from the taxonomic and medical standpoints. Behrend's spelling *Trichosporon*, dating from 1890, should take precedence over Vuillemin's *Trichosporum* (1902). The relation of various species of the genus to the two hitherto existing types of 'piedra', black and asteroid, is discussed, and a new species described [without a Latin diagnosis], *T. minor*, the agent of axillary 'piedra'.

591. Viégas (A. P.). **Notas sôbre três fungos brasileiros. 2. Piedraia hortai (Brumpt) Fonseca e Arêa Leão.** [Notes on three Brazilian fungi. 2. *Piedraia hortai* (Brumpt) Fonseca & Arêa Leão.]—*Bragantia, S. Paulo*, iii, 3, pp. 37–44, 4 figs., 1943. [Received September, 1945.]

A description is given of *Piedraia hortai* based on material collected from the human scalp at Campinas, São Paulo, Brazil. The author does not accept Dodge's and de Almeida's classification of the pathogen in the Endomycetales and proposes its transference to the Plectascales. He further suggests the erection of a new family, the Piedriaceae, for the accommodation of the genus, which differs from other members of the Plectascales in the discharge of its ascospores through the temporary breach in the surface of the stroma.

592. Viégas (A. P.). **Alguns fungos do Brasil II. Ascomicetos.** [Some fungi of Brazil II. Ascomycetes.]—*Bragantia, S. Paulo,* iv, 1–6, pp. 5–392, 220 pl., 34 figs., 1944.

The following fungi occur as parasites of man in São Paulo, Brazil: *Ectotrichophyton* [*Trichophyton*] *mentagrophytes, Microsporum paraferrugineum,* and *Piedraia hortai.*

593. Arêa Leão (A. E.), Cury (A.), & Martins Ferreira (J.). **'Tinea nigra' ('keratomycosis nigricans palmaris'): observação e estudo de um caso.** ['Tinea nigra' ('keratomycosis nigricans palmaris'): observation and study of a case.]—*Rev. brasil. Biol.,* v, 2, pp. 165–177, 14 figs., 1945. [English summary.]

In connexion with a case of 'tinea nigra' or 'keratomycosis nigricans palmaris' in a 28-year-old male resident of Minas Geraes, Brazil, the writers review the history of the disease and describe its clinical picture and the morphology of the causal organism, *Cladosporium wernecki,* in the skin and in culture. There is considered to be no valid reason for the transference of *Cladosporium* to *Hormodendrum,* and the former is therefore maintained on grounds of priority.

594. Benedek (T.). **Contribution to the epidemiology of tinea capitis. III. Some diagnostic problems in tinea capitis.**—*Mycologia,* xxxvi, 6, pp. 508–626, 1944.

The existence of carriers of the pathogens of tinea capitis is discussed, with emphasis on their number and importance in epidemiology. The use of Wood's light is advocated for the detection of the carriers, the establishment of the extent of infection of the scalp, the control of the progress and efficiency of therapy, and the final determination of a cure: however, the extravagant claims of Livingood and Pillsbury (*J. invest. Derm.,* iv, pp. 43–57, 1941) for this apparatus as a means of identification of dermatophytes in giant cultures are not supported by the author's experience. Chloral lactophenol formulae 1 and 2 are recommended for the demonstration of fungi on direct microscopic examination. *Achorion gypseum* Bodin, 1907 is upheld as a taxonomic entity, contrary to the view of some workers that it is a synonym of *Microsporum fulvum.*

595. Pinto Nogueira (J. F.). **Contribuição para o estudo etiológico das tinhas de Lisboa.** [Contribution to the etiological study of Lisbon ringworms.]—*An. Inst. Med. trop.,* ii, pp. 197–205, 2 graphs, 1945. [French and English summaries.]

Of 126 cases of ringworm investigated by the author at the Lisbon Institute of Tropical Medicine from 1943 to 1945, 79 were caused by *Trichophyton violaceum,* 29 by *T. acuminatum,* 7 by *T. crateriforme,* 9 by *Microsporum felineum,* and 2 by *Achorion schoenleini,* representing percentages of 62·7, 23, 5·5, 7·3, and 1·5, repectively.

596. Lynch (F. W.). **Ringworm of the scalp (tinea capitis).**—*J. Lancet,* N.S., lxv, 6, pp. 228–229, 1945.

The present epidemic of ringworm of the scalp in the United States started on the east coast about five years ago and has gradually extended south and west. In Chicago, estimates of the incidence of infection range from 5,000 to 65,000 cases. In November 1944, the Minnesota Dermatological Society called the attention of the public health authorities to the danger of an impending epidemic, and at the time of writing (April, 1945), St. Paul probably harboured 150 to 500 cases, mostly caused by *Microsporum audouini,* though

M. lanosum was responsible for a few. Some general observations are made on diagnosis and treatment, while various problems remaining to be solved in connexion with the disorder are briefly indicated.

597. Bernhardt (E.). **A simplified method for culturing fungi from the scalp.**—*New Engl. J. Med.*, ccxxxi, 21, pp. 703–705, 1 fig., 1944.

The writer has obtained very satisfactory results in the differentiation of the fungi responsible for tinea capitis at Boston, viz., *Trichophyton mentagrophytes* and *Microsporum* spp., by the use of a medium consisting of 5 c.c. rice, 25 c.c. water, and 0·8 c.c. aqueous solution of gentian violet 1 in 10,000. Fourteen strains of *M. lanosum* and seven of *M. audouini* (the principal agents of scalp ringworm in the United States) were isolated and identified by this method.

598. Muskatblit (E.) & Targan (N. A.). **Ringworm of the eyebrow.**—*Arch. Derm. Syph., N.Y.*, lii, 2, p. 116, 1945.

Ringworm of the eyebrow, a rare condition, was caused in a nine-year-old boy in New York by *Microsporum audouini*, which was also isolated from a scalp lesion visible only under Wood's light. The filter also proved valuable in the detection of the fungus on the hairs of the eyebrow, which appeared normal under ordinary light, the only sign of infection being an annular patch above the eyebrow, 3 cm. in diameter, with a slightly raised, erythematous, scaly border and a centre of almost normal skin.

599. Von Gutfeld (F. J.) & Stone (R. E.). **Studies on the transmission of 'athlete's foot' by soap : experiments with artificially infected fungus carriers.**—Abs. in *J. Bact.*, xlv, 1, p. 109, 1945.

At the Medical College of Virginia, cotton strings and small squares of linen were infected with *Trichophyton gypseum*, *Microsporum audouini*, or *M. lanosum* and placed on cakes of soap, from which they were removed after varying periods, rinsed with distilled sterile water, and transferred to 1 per cent. peptone water. All three fungi were found to be viable after at least an hour's contact with the soap, indicating the possibility of transmission of athlete's foot through this medium.

600. Canizares (O.). **Favus acquired in service overseas : report of involvement of the toe-nails.**—*Arch. Derm. Syph., N.Y.*, li, 3, p. 178, 1 fig., 1945.

A case of favus (*Achorion schoenleini*) of the toe-nails contracted by a 27-year-old soldier in North Africa is reported. Since the disorder is very rare in the United States but prevalent in Morocco, Tunisia, and Libya, as well as in certain European countries, an examination of the nails, skin, and scalp should be made in the case of all personnel returning from areas where the fungus is endemic. In unpublished studies by the author at the Madrid Institute of Hygiene, favus was diagnosed in 45 per cent. of the samples of hair from patients with tinea capitis in Spanish Morocco.

601. Catanei (A.). **Sur le passage dans le sang des champignons parasites des teignes. (Étude expérimentale.)** [On the passage through the blood of the parasitic fungi of ringworms. (Experimental study.)]—*Arch. Inst. Pasteur Algér.*, xxiii, 3, pp. 173–175, 1945.

In exceptional cases of experimentally induced ringworm (*Ctenomyces* [*Trichophyton*] *mentagrophytes*) in guinea-pigs, the fungus, which produces an allergic condition with resistance to reinoculation, may traverse the blood stream and be recovered from the apparently healthy spleen.

602. Catanei (A.). **Les effets de l'inoculation intrapéritoneale d'un dermatophyte au Cobaye. Existence d'une prémunition d'origine mycosique.** [The effects of intraperitoneal inoculation with a dermatophyte on the Guinea-Pig. Existence of premunition of mycotic origin.]—*Arch. Inst. Pasteur Algér.*, xxiii, 1, pp. 21–44, 1945.

An Algerian culture of *Ctenomyces* [*Trichophyton*] *mentagrophytes*, inoculated into the peritoneum of the guinea-pig, was disseminated throughout the system, where it conferred a partial and temporary immunity from cutaneous reinfection.

603. **Ringworm of the scalp epidemic stopped.**—*J. Amer. med. Ass.*, cxxvii, 13, p. 869, 1945. [*B.H.*, xx, 401.]

An epidemic of ringworm affecting 10 to 15 per cent. of a school population of 4,500 at Hagerstown, Maryland, was successfully controlled without the use of X-rays. Methods included examination by Wood's light, treatment at a treatment centre, the wearing of protective caps at school and quarantine from various public places, the enforcement of rigid sterilization provisions in barbers' shops, and an educational campaign.

604. Perlman (H. H.). **A clinical appraisal of the treatment of the dermatomycoses of children.**—*Urol. cutan. Rev.*, xlix, 2, pp. 97–117, 1945.

Recent trends in the therapy of juvenile dermatomycoses are reviewed and critically discussed in the light of contemporary literature on the subject. Tables are given showing the English name, official title, common name, official abbreviation, United States Pharmacopoeia or National Formulary product, and composition of a number of fungicides and adjuvants in common use.

605. Freedman (L. J.) & Beinhauer (L. G.). **Roentgen-ray treatment of tinea capitis.**—*Urol. cutan. Rev.*, xlix, 6, pp. 376–378, 1945.

At the Western Pennsylvania Hospital, Pittsburgh, 53 patients (41 males and 12 females) aged from 2 to 12 years were successfully treated for tinea capitis (*Microsporum audouini*) by temporary Roentgen-ray epilation. The Purple–X bulb supplemented or replaced Wood's light as an aid in diagnosis. The treatment consisted of five overlapping portals, each 21 cm. in diameter and at 25 cm. target-skin distance, using an average dose of 380 roentgens per field at one sitting.

606. Emmons (C. W.) & Hollaender (A.). **Relation of ultraviolet induced mutations to speciation in dermatophytes.**—*Arch. Derm. Syph., N.Y.*, lii, 4, pp. 257–261, 6 figs., 1945.

Four types of mutants induced by monochromatic ultra-violet radiation of *Trichophyton mentagrophytes* conidia were differentiated after five years' subculturing on acid dextrose agar (pH 5·6), of which (1) closely resembled *T. interdigitale*, (2) *T. niveum*, (3) *T. gypseum granulosum*, and (4) *T. violaceum*. These observations suggest the possibility that some of the so-called 'species' of *Trichophyton* may be of mutational origin.

607. Cohen (T. M.) & Pfaff (R. O.). **Penicillin in dermatologic therapy : report of results in one hundred cases.**—*Arch. Derm. Syph., N.Y.*, li, 3, pp. 172–177, 1945.

Penicillin at the rate of 50,000 Oxford units per 30 gm. ointment base was successfully used in a naval hospital in the South Pacific area in the treatment of moniliasis and dermatophytoses accompanied by streptococcic pyoderma.

608. Franks (A. G.), Dobes (W. L.), & Romano (D.). **Penicillin in the treatment of cutaneous disease.**—*Arch. Derm. Syph., N.Y.*, lii, 1, pp. 14–16, 1945.

Penicillin therapy proved to be valueless in the authors' cases of 'favus' (*Trichophyton crateriforme*) and chronic fungus dermatitis (*T. gypseum*).

609. Morginson (W. J.). **The clinical use of penicillin in dermatology.**—*Sth. med. J.*, xxxviii, 5, pp. 320–326, 1945.

This is a tabulated summary of the factual observations made on 102 dermatological conditions treated with penicillin at the Bushnell General Hospital, Brigham City, Utah, where a pilot unit for therapy by this method was opened on 1st April, 1943. Among the diseases amenable to the treatment was actinomycosis, all five cases of which responded favourably. Penicillin was not used clinically against trichophytosis in this series of investigations, but it failed to arrest the growth of *Trichophyton purpureum*, *T. gypseum*, and *Microsporum fulvum* in pure cultures on Sabouraud's and acid tryptose agar.

610. Herrick (J. A.). **Effects of gliotoxin on Trichophyton gypseum.**—*Ohio J. Sci.*, xlv, 2, pp. 45–46, 1945.

In *in vitro* experiments, gliotoxin (0·01 per cent.) destroyed 99 to 100 per cent. of the spores of *Trichophyton gypseum*, the agent of athlete's foot, in two hours, but no toxic effects were exerted on the fungus by the next dilution tested (0·001 per cent.) even after 24 hours.

611. Reilly (H. Christine), Schatz (A.), & Waksman (S. A.). **Antifungal properties of antibiotic substances.**—Abs. in *J. Bact.*, l, 1, p. 121, 1945.

Of a number of antibiotics tested for their fungistatic properties, gliotoxin exerted a marked fungicidal action on *Trichophyton mentagrophytes*.

612. Herrick (J. A.). **Antifungal properties of clavacin.**—*Proc. Soc. exp. Biol., N.Y.*, lix, 1, pp. 41–42, 1945.

At the University of Michigan, Ann Arbor, a 1 per cent. solution of clavacin was fungicidal to *Trichophyton gypseum* in 15 minutes (the minimum exposure tested), the corresponding periods for *Oidium* [*Geotrichum*] *asteroides* and *Monilia* [*Candida*] *albicans* being 15 to 60 and 30 minutes, respectively. At 0·5 per cent. the antibiotic destroyed *T. gypseum* in 15 to 45 minutes, *O. asteroides* in one to three hours, and *C. albicans* in 45 minutes to three hours only. *T. gypseum* succumbed to a 0·1 per cent. solution in two to five hours. Similarly, a 0·04 per cent. solution exerted little inhibitory effect on *G. asteroides* and *C. albicans*, whereas the growth of *T. gypseum* ceased entirely in the presence of 0·01 to 0·02 per cent. clavacin and was retarded at 0·001 per cent.

613. Vass (Ilona). **Treatment of pityriasis rosea with Trichophyton extract: a preliminary report.**—*Arch. Derm. Syph., N.Y.*, li, 3, pp. 203–204, 1945.

Intradermal injections of a highly diluted (1 in 500) *Trichophyton* extract applied in increasing doses at two-day intervals for a fortnight proved beneficial to 86 out of 90 patients suffering from pityriasis rosea at the New York Post-Graduate Medical School, Columbia University, the eruption almost or quite disappearing after three to six treatments.

614. Rothman (S.), Smiljanic (Adelaide M.), & Shapiro (A. L.). **Fungistatic action of hair fat on Microsporon audouini.**—*Proc. Soc. exp. Biol., N.Y.*, lx, 3, pp. 394–395, 1945.

Adult hair fat was found to contain free saturated aliphatic acids which inhibit the growth of *Microsporum audouini*, the agent of juvenile tinea capitis, in concentrations of 0·0002 to 0·001 per cent.

615. Ghosh (L. M.) & Dey (N. C.). **Studies in ringworm. Part II. Therapy of tinea capitis by gonadotropic hormones.**—*Indian med. Gaz.*, lxxx, 8, pp. 381–383, 1945.

At the Calcutta School of Tropical Medicine, 23 cases of scalp ringworm, 12 caused by *Microsporum audouini*, 6 by *Trichophyton violaceum*, and 5 by *T. crateriforme*, were treated by the administration of gonadotropic hormones, an average of ten injections of 1 c.c. being given to each patient over a five-week period. A favourable response was induced in nine cases (5 of *M. audouini*, 3 of *T. crateriforme*, and 1 of *T. violaceum*), seven of those benefiting being girls.

616. Elson (W. O.). **The antibacterial and fungistatic properties of propamidine.**—*J. infect. Dis.*, lxxvi, 3, pp. 193–197, 1 graph, 1945.

Propamidine (4–4′ diamidino diphenoxypropane) was experimentally shown to be active against a number of human pathogens, notably *Trichophyton sulphureum*, *Achorion schoenleini*, *Blastomyces dermatitidis*, and *Sporotrichum schencki*, the growth of which was inhibited at concentrations of 0·31, 0·075, 0·075, and 0·018 mg. per 20 c.c. agar, respectively.

617. Keeney (E. L.), Ajello (L.), Broyles (E. N.), & Lankford (Elsie). **Propionate and undecylenate ointments in the treatment of tinea pedis and an in vitro comparison of their fungistatic and antibacterial effects with other ointments.**—*Bull. Johns Hopkins Hosp.*, lxxv, 6, pp. 417–439, 5 figs., 1944.

The clinical efficacy of propionate-propionic acid (16·4 per cent. sodium propionate and 3·6 per cent. propionic acid) and 5 and 10 per cent. undecylenate-undecylenic acid ointments in comparison with other preparations for the treatment of tinea pedis was investigated in 120 cases among midshipmen at the United States Naval Academy. Highly satisfactory results were obtained, both ointments in a 'carbowax' base representing an improvement over any of the remedies in current use. Propionate-propionic acid was slightly superior to undecylenate-undecylenic in *in vitro* fungistatic and bacteriostatic effects, and also clinically. [See also No. 436.]

618. Shapiro (A.L.) & Rothman (S.). **Undecylenic acid in the treatment of dermatomycosis.**—*Arch. Derm. Syph., N.Y.*, lii, 3, pp. 166–171, 1945.

A new fungicidal preparation containing 20 per cent. zinc undecylenate and 5 per cent. undecylenic acid in a vanishing emulsion base (pH 6·5) was tested clinically at the Department of Medicine, University of Chicago, on 150 persons suffering from dermatomycosis, including 113 (63 out-patients and 50 students) with tinea pedis. Of 62 fungi cultured in this group, 29 (46·7 per cent.) were *Trichophyton gypseum*, 2 (3·2) *T. purpureum*, 8 (12·9) *Epidermophyton inguinale* [*E. floccosum*], 19 (30·6) *Monilia* [*Candida*] *albicans*, and 4 (6·2) *Sporotrichum*. Complete clinical cure was effected in the great majority of out-patients with tinea pedis (86 per cent.) within a month, regardless of the causal organism, while 14 out of 29 students were comparably benefited within the period of the experiment. The ointment also gave entire relief of tinea cruris and tinea axillaris in six cases, of infection of the glabrous skin by *Microsporum audouini* in three, and of tinea capitis caused by the same fungus in three.

619. Wyss (O.), Ludwig (B. J.), & Joiner (R. R.). **The fungistatic and fungicidal action of fatty acids and related compounds.**—*Arch. Biochem., N.Y.*, vii, 3, pp. 415–425, 1945.

In tests at the Research Department, Wallace & Tiernan Products, Inc., Beltsville, New Jersey, on the fungistatic and fungicidal action of a number

of saturated and unsaturated fatty acids and related compounds, the long-chain fatty acids proved superior to other acids and allied derivatives both in the inhibition of fungal growth and destruction of the spores. The fungistatic concentrations of undecylenic acid, a representative of the more active members of the test compounds, at pH 6·5 in respect of *Trichophyton interdigitale*, *T. purpureum*, *T. violaceum*, *Microsporum audouini*, *Epidermophyton inguinale* [*E. floccosum*], *Torula* sp., *Monilia* [*Candida*] *albicans*, *Aspergillus niger*, and *Penicillium notatum* were 0·004, 0·0015, 0·0025, 0·0025, 0·0025, 0·015, 0·007, 0·05, and 0·045 per cent., respectively. The concentrations of undecylenic acid required to kill *A. niger* and *Trichophyton interdigitale* in two hours at 37° C. were 0·15 and 0·06 per cent., respectively.

620. Wernsdörfer (R.). **Die Sulfonamidbehandlung der Trichophytia profunda und der Sykosis simplex.** [The sulphonamide treatment of trichophytia profunda and sycosis simplex.]—*Med. Z., München*, ii, 1, pp. 64–65, 1944.

Very promising results were obtained in ten cases of trichophytia profunda at the University Skin Clinic, Erlangen, Germany, by the internal and local administration of albucid, while 34 patients suffering from sycosis simplex (in addition to the 15 already reported on in *Münch. med. Wschr., 1942*, 23, p. 521, 1942) were similarly benefited.

621. Byrne (E. A. J.) & Croxon (H. J.). **Bactericidal and fungicidal action of organic mercurials with special reference to the dermatomycoses.**—*Indian med. Gaz.*, lxxix, 8, pp. 357–361, 1944.

Phenyl mercuric chloride and phenyl mercuric acetate are recognized in plant pathology as possessing specific and rapid fungicidal properties in high dilution, and similar effects have been obtained in the treatment of various human dermatomycoses, including ringworm of the trunk and limbs, tinea cruris, and epidermophytosis of the feet.

622. Fanning (J. L.). **Common recalcitrant dermatoses.**—*Calif. west. Med.*, lxii, 6, pp. 318–319, 1945.

Specific trichophytin desensitization has been employed by the writer since 1934 at Sacramento, California, in the therapy of chronic recurrent dermatophytosis of the hands and fingers with generally favourable results.

623. González Ochoa (A.) & Ruiloba (J.). **Acción de la mezcla urea-sulfanilamida-acido p. aminobenzoico 'in vitro' sobre Microsporum canis y Candida albicans.** [Action of the mixture urea-sulphanilamide-*p*-aminobenzoic acid *in vitro* on *Microsporum canis* and *Candida albicans*.]—*Rev. Inst. Salubr. Enferm. trop.*, vi, 1, pp. 1–9, 1945. [English summary.]

Concentrations of urea exceeding 1·6 per cent., which are already fungistatic to *Microsporum canis*, when mixed with sulphanilamide produced a cumulative and not a synergistic action. At 1·6 per cent. the former constituent impeded the fungistatic effect of the latter, stimulating the growth of the organism instead of inhibiting it.

Candida albicans is resistant to sulphanilamide, the action of which was not potentiated by the admixture of 1·6 per cent. urea.

624. Lewis (J. H.) & Morginson (W. J.). **Treatment of trichophytosis with ethyl chloride.**—*Arch. Derm. Syph., N.Y.*, l, 4, pp. 243–244, 1944.

Ethyl chloride was applied according to Bograd's technique [*Med. Mycol.*, No. 390] to 40 cases of trichophytosis at the Bushnell General Hospital, Brigham City, Utah. It effected an immediate clinical improvement, but failed to prevent recurrences, mostly within ten days.

625. Phillips (B.). **The phenol-camphor treatment of dermatophytosis.**—*Brit. J. Derm. Syph.*, lvi, 11–12, pp. 219–227, 1944.

Of 3,250 men and 500 women on military service examined, 5·5 per cent. of the former were found to be suffering from various forms of dermatophytosis and 6 per cent. of the latter from tinea pedis. A solution of equal parts of phenol and camphor was applied to 230 cases, viz., 137 of tinea pedis, 83 of tinea cruris, and 10 of tinea axillaris, with eminently satisfactory results, there being no failures in the series and only 1·7 per cent. relapses during a three months' follow-up. The average periods required for the cure of tinea cruris, tinea pedis, and tinea axillaris by this method were 4·3, 4·5, and 4·9 days, respectively.

626. James (T.). **Interdigital ringworm treated with solution of sulphurated lime.**—*Lancet*, ccxlix, 6370, pp. 401–402, 1945.

The writer has obtained excellent results at Cape Town in the treatment of interdigital ringworm [*Trichophyton interdigitale*] by a solution consisting of 25 gm. quicklime, slaked with an equal quantity of water, 50 gm. sublimed sulphur, and sufficient water to yield a total volume of 1 l., which is reduced to two-thirds by boiling, the mixture then being allowed to cool and the supernatant liquid decanted after settling of the solid. Prehn's powder (*J. Amer. med. Ass.*, cxi, p. 685, 1938), consisting of 5 parts salicylic acid, 2 of menthol, 8 of camphor, 50 of boric acid, and 35 of starch, was used when available as a prophylactic for a fortnight after the treatment.

627. Holm (K.). **Behandling af Fodsvamp med Aetylparaoxybenzoat belyst ved systematiske Svampeundersøgelser.** [Treatment of dermatophytosis pedis with ethylparaoxybenzoate in the light of systematic fungus studies.]—*Nord. Med.*, xxi, 1, pp. 9–10, 1944. [English summary.]

Of 23 patients treated for dermatophytosis pedis with amycen ointment (containing 5 per cent. ethyl para-oxybenzoate) at the Communal Hospital, Copenhagen, 18 were cured. In a comparative series of 23 treated with the same preparation plus 3 per cent. salicylic acid, 17 responded favourably. The addition of the latter compound to the ointment is, therefore, of no advantage.

Attention is drawn to the frequency of onychomycosis in cases of dermatophytosis pedis, the former condition probably playing an important part in the reinfection of the skin.

628. Goodman (H.). **Pharmaceutic treatment of ringworm of the toes.**—*N.Y. St. J. Med.*, xlv, 1, p. 1202, 1945.

Some formulae are given for the treatment of ringworm of the toes in each of its three phases, viz., (1) immediate reaction to infection with blisters, (2) fissure, and (3) hyperkeratinization or pseudo-callus formation.

629. Lawson (R. N.). **Therapy of tinea.**—*Milit. Surg.*, xciv, 5, pp. 301–302, 1944.

During the past four years the writer has treated over 3,000 cases of tinea cruris and tinea circinata among United States military service personnel with Castellani's paint, prepared as follows: to 20 gm. basic fuchsin in 200 c.c. 96 per cent. ethyl alcohol are added 2,000 c.c. 5 per cent. phenol in distilled water; the mixture is filtered, 20 gm. boric acid added, the solution left to stand for two hours, 100 c.c. acetone stirred in, and after a further two hours' standing, 200 gm. resorcin are added.

630. Greene (H. S.). **Report on the microbiological flora and sterilization of used shoes.**—*J. Amer. Leath. Chem. Ass.*, xl, 3, pp. 96–110, 1945.

Among the organisms isolated on Sabouraud's medium from used shoes at the Institute of Scientific Research, University of Cincinnati, were the agents of athlete's foot (*Trichophyton* spp. including possibly *T. acuminatum*), *Epidermophyton* (?) *cruris* [*E.* (?) *floccosum*], *Sporotrichum* (?) *schencki*, *Aspergillus niger*, *A. fumigatus*, *A. glaucus*, *A. ochraceus*, *Penicillium luteum*, *Mucor racemosus*, *Trichoderma koeningi*, and *Alternaria* and *Oidium* spp. In an investigation of various methods of sterilization a 1 per cent. formaldehyde solution was found to be fungicidal to *T. rosaceum* within five minutes. The use of (*a*) this preparation is accordingly recommended, followed by (*b*) washing in soap solution (0·3 per cent. white olive) maintained at 38° to 40° C., pH 9·9, and rinsing for two minutes either in water or 0·5 per cent. sodium bisulphite (the former being possibly adequate), and (*c*) two minutes' immersion in a 10 per cent. cationic oil emulsion in water containing 0·5 per cent. pentachlorophenol (pH 2·9).

631. Fulton (C. O.), Gibbons (N. E.), & Moore (R. L.). **The fungicidal effect of vegetable-tanned leather and various disinfectants on Trichophyton gypseum and T. interdigitale.**—*Canad. J. Res.*, Sect. F, xxii, 6, pp. 163–168, 1 pl., 1944. [*R.A.M.*, xxiv, 160.]

Vegetable-tanned leather was fungicidal to *Trichophyton gypseum* and *T. interdigitale*, but neither this type of leather nor chrome-tanned, after leaching overnight in running water, retained any fungistatic or fungicidal property. Phenyl mercuric acetate, tested under conditions similar to those occurring in the fat-liquoring operation, was most effective, destroying the fungi at a concentration of 1 in 100,000, at which strength it is not likely to injure the skin.

632. Hoerlein (A. B.). **Studies on animal dermatomycosis.**—*Thesis, Cornell Univ.*, 79 pp., 82 figs., 1945. [*V.B.*, xv, 353.]

In studies on ringworms of animals in central New York State the author isolated *Microsporum canis* from cats and dogs, *Trichophyton album* from cattle, and *M. equinum* and *T. equinum* from horses. An extensive review of the literature in given and diagnostic methods discussed.

633. Hall (H. T. B.). **Ringworm in Horses.**—*Agric. J. Fiji*, xvi, 1, p. 12, 1945.

In this paper (reprinted from *Fiji Times & Herald*), reference is made to a virulent epidemic of equine ringworm (*Microsporum equinum*) in Viti Levu. In addition to the usual sanitary precautions, daily treatments with mycozol, cozsal, 10 per cent. Stockholm tar in coco-nut oil, or 10 per cent. dieselene in the same base are recommended.

634. H[all] (H. T. B.). **Treatment of ringworm in Horses.**—*Agric. J. Fiji*, xvi, 3, p. 62, 1945.

A mixture of equal parts of dieselene (not diesel oil) and coco-nut oil applied once every three days to the affected areas is recommended for the treatment of ringworm in horses [*Microsporum equinum*]. The lotion should not be allowed to pour down the side of the body or to come into contact with a wound. Treatment should continue until the last trace of the disease has disappeared. A lime-sulphur wash is another treatment suggested. It can be sprayed on and consequently a large number of horses may be treated. A strong tincture of iodine, 10 per cent. salicylic acid, or mycosol are other possible treatments, but they are expensive.

635. Bernhardt (E.). **Ringworm in domestic animals.**—*Middx Vet.*, iv, pp. 6–11, 1944.

The clinical, microscopic, and cultural diagnosis of ringworm in domestic animals is described.

636. Blanc (G.) & Catanei (A.). **Sur une teigne de l'Écureuil marocain Xerus (Atlantoxerus) getulus.** [On a ringworm of the Moroccan Squirrel, *Xerus* (*Atlantoxerus*) *getulus*.]—*Arch. Inst. Pasteur Algér.*, xxii, 3, pp. 157–161, 1944.

A new species of *Candida*, *C. blanci* Catanei 1944, was isolated from ringworm lesions on the Moroccan squirrel (*Xerus getulus*), which was not previously known to be subject to disorders of this type.

637. Costa (O. G.) & Junqueira (M. A.). **Papular sporotrichosis.**—*Arch. Derm. Syph., N.Y.*, li, 4, pp. 261–262, 2 figs., 1945.

Sporotrichum schencki was isolated from nasal papules in a Brazilian farmer, who responded favourably to daily doses for ten days of 0·26 gm. potassium iodide. This form of sporotrichosis is stated to be rare.

638. De Magalhães (O.). **Ensaios de micologia. Contribução ao conhecimento dos cogumelos patogênicos em Minas Geraes.** [Mycological studies. Contribution to the knowledge of pathogenic fungi in Minas Geraes.]—*Mem. Inst. Osw. Cruz*, xlii, 1, pp. 41–55, 1 col. pl., 6 figs., 1945. [English summary.]

Among the fungi concerned in the etiology of various pathological conditions treated by the author between October, 1941, and December, 1943, were *Rhinocladium beurmanni* [*Sporotrichum schencki*], infection by which in a 35-year-old male developed as a sequel to the bite of a fish while bathing, and *Aspergillus fumigatus*, the agent of two cases of otomycosis, one in a 5-year-old child and another in a 40-year-old female.

639. Leiby (G. M.), Sulzberger (M. B.), & Baer (R. L.). **Sporotrichosis in New York State: report of two new cases and tabulated discussion of twenty-six previous ones.**—*Arch. intern. Med.*, lxxv, 3, pp. 145–150, 3 figs., 1945.

Two new cases of sporotrichosis (*Sporotrichum schencki*) are reported, one in a 14-year-old boy and the other in a 47-year-old woman, both in New York City. Diagnosis was confirmed by (1) positive cultures, (2) positive reactions to sporotrichin tests, and (3) response to oral medication with potassium iodide. Particulars of 26 cases previously reported in the State are tabulated and briefly discussed.

640. Smith (L. M.). **Sporotrichosis: report of four clinically atypical cases.**—*Sth. med. J.*, xxxviii, 8, pp. 505–509, 7 figs., 1945.

Four cases of sporotrichosis (*Sporotrichum schencki*) treated by the author at El Paso, Texas, differed in some clinical features from the accepted picture of the disease (1) in a 35-year-old female being characterized by deep, furunculoid lesions on the cheek, (2) and (3) in a mother (42) and 3-year-old daughter by superficial facial lesions, and (4) in a 45-year-old male by a small subcutaneous sinus beneath the right knee with involvement of the tibia. All the patients responded favourably to therapy with Lugol's solution.

641. Carini (A.) & Springer (L.). **Caso humano de pequeno cisto subcutâneo cheio de esporos de um cogumelo não identificado.** [A human case of a small subcutaneous cyst containing spores of an unidentified fungus.]—*Arq. Inst. biol., S. Paulo*, xxviii, 260, pp. 42–45, 5 figs., 1944. [*B.A.*, xix, No. 1189.]

A description is given of the intracellular *Sporotrichum*-like spores of an unidentified fungus found in a small inflammatory cyst on the foot of a 40-year-old male.

642. Trespalacios (F.), Gonzalez Peris (G.), & De Laosa (O.). **Esporotricosis linfangitica. Reporte de tres nuevos casos.** [Sporotrichial lymphangitis. Report of three new cases.]—*Rev. Sif., Leprol., Derm., Cuba*, ii, 1, pp. 26–30, 3 figs., 1945. [*T.D.B.*, xlii, 586.]

Three cases of sporotrichosis, an uncommon disease in Cuba, are reported, from two of which *Sporotrichum beurmanni* [*S. schencki*] was isolated.

643. Romaña (C.) & Ughetti (R.). **Sobre un caso de esporotricosis.** [A case of sporotrichosis.]—*An. Inst. Med. reg., Tucumán*, i, 2, pp. 185–192, 6 figs., 1945.

The authors refer to a case of a young woman with ulcerated lesions in the extremities from which *Rhinocladium schencki-beurmanni* [*Sporotrichum schencki*] was isolated.

644. Campbell (Charlotte C.). **Use of Francis' glucose cystine blood agar in the isolation and cultivation of Sporotrichum schenckii.**—*J. Bact.*, l, 2, p. 233, 1945.

Francis's glucose cystine blood agar has proved to be an excellent medium for the rapid isolation and identification of *Sporotrichum schencki*, which develops as a yeast and remains in the same phase of growth when incubated at 37° C. Similar results were also obtained with *Blastomyces dermatitidis* and *B. brasiliensis*.

645. Conant (N. F.), Martin (D. S.), Smith (D. T.), Baker (R. D.), & Callaway (J. L.). **Manual of clinical mycology.**—xiii + 348 pp., 138 figs., 11 maps, Philadelphia & London, W. B. Saunders Co., 1945. 17*s.* 6*d.* [*B.A.*, xix, No. 4991; *R.A.M.*, xxiv, 276.]

In this military medical manual written under the auspices of the Division of Medical Sciences of the National Research Council, the authors present the essential details concerning the principal mycoses, with particular reference to the latest research.

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